

# FARMER SUICIDES IN KARNATAKA

A.V. MANJUNATHA  
K.B. RAMAPPA

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All India Study Coordinated by

Agricultural Development and Rural Transformation Centre  
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Bengaluru - 560 072

## Prepared by

Dr. A.V. Manjunatha, Principal Investigator

Dr. K.B. Ramappa, Co-Principal Investigator

## Research Team

Dr. Pesala Peter, Consultant

Ms. Mamatha, Research Associate

Ms. D.T. Preethika, Research Associate

Mr. Keshav Murthy, Consultant

Mr. Bangarappa, Research Assistant

Mrs. K.M. Prema Kumari, Research Associate

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## Contact:

**Dr. A.V. Manjunatha**, Ph.D. in Agricultural Economics (Justus Liebig University, Germany)

Assistant Professor

Agricultural Development and Rural Transformation Centre (ADRTC)

ISEC, Bengaluru - 560 072

Ph: +91-80-23215468, 23215519 Ext.222 (O)

Email: [manjunath@isec.ac.in](mailto:manjunath@isec.ac.in); [manjublore@gmail.com](mailto:manjublore@gmail.com)

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A.V. Manjunatha  
K.B. Ramappa

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The study enabled to understand the causes of farmer suicides and suggestions to prevent the same. For this purpose, both secondary and primary data has been used pertaining to the agriculture year 2015-16. Primary data was collected from 107 victim households covering four major districts namely Mysuru, Mandya, Haveri and Belagavi.

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**A.V. Manjunatha**  
Principal Investigator

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## EXECUTIVE SUMMARY

### Background

Farmer suicides has turned out to be one of the major policy concern in India that has resulted in profound implications on the quality of life of farmers. According to the United Nations Commission on Sustainable Development (UNCSD), one farmer committed suicide every 32 minutes between 1997 and 2005 in India. The tendency of farmers resorting to the extreme step of suicide was alarming in Maharashtra, Telangana, Madhya Pradesh, Chhattisgarh and Karnataka during 2014 as per National Crime Records Bureau (NCRB). These states together accounted for 90 per cent of total farmer suicides (5056). The unfortunate incidences of farmer suicides continued in the subsequent years. Number of farmers who committed suicide in 2015 went up by 42 per cent as compared to 2014. The five states remained as suicides hotspots in both the years, which is due to some common agrarian conditions and history of agricultural development in these states. Reduction in farmer suicides was observed only in Chhattisgarh among five states when compared between 2014 and 2015. It is important to note that half of the farmer suicides reported in 2014 and 2015 occurred during July to November. Fifteen farmers committed suicide every day in the country during 2014 and this went up to 21 in 2015.

Many studies have addressed the issue of farmer suicides from various angles. A detailed perusal of the literature in India suggests multiple causes and these could be clubbed into one, namely increasing distress in the farm sector. This may be due to the squeezing income under the pressure of increasing cost of cultivation and higher cash needs of the family. This is further aggravated by the climatic factors, low productivity and market failures both in factor and product markets. But among these, the farm indebtedness is considered as the major triggering factor in most of the cases. The scenario of indebtedness in the country also supports this hypothesis. The per cent of indebted farm households to total farm households was highest at 89 per cent in Telangana followed by 77 per cent in Karnataka. This was 56 per cent, 46 per cent and 37 per cent in Maharashtra, Madhya Pradesh and Chhattisgarh respectively. According to NCRB (2015), prominent causes responsible for farmer suicides in India were: bankruptcy or indebtedness (20.6%); family problems (20.1%); failure of crops (16.8%); illness (13.2%) and drug abuse/alcoholic addiction (4.9%). The Situation Assessment Surveys of the National Sample Survey Organization (NSSO, 2013) has reconfirmed the worsening situation of farm households which indicated that 52 per cent of the farm households in India are indebted. Repeated failure of crops leads to loss of income to the extent that the farmers could hardly earn even to maintain their livelihood expenses. Such circumstances compel the farmers to borrow from private money lenders (being easily available in the emergency situations) after exhausting all the institutional sources of borrowing. Over a period of time, ultimately, they encounter a debt-trap situation wherein committing suicide turn out to be the only way to escape the mental sufferings.



In Karnataka, the Department of Agriculture recorded four farmer suicides per day between the periods from July, 2015 to June, 2016. Out of 1490 farmer suicides that occurred during this period in Karnataka, 80 per cent were committed by marginal and small farmers. The period of July, 2015 to October, 2015 (Kharif) was peak of farmers frustration in Karnataka as 56 per cent of suicides occurred during this period. The intensity of suicides in Mandya was extremely high at 62 suicides per lakh hectares of net sown area and 49 farmer suicides per lakh hectare of gross sown area. Haveri had the highest of 57 suicide cases per lakh of farming families. An amount of Rs. 39.20 crores was paid as compensation to 784 victim families at the rate of Rs. 5 lakhs per family during period from July 2015 to June 2016. While 408 cases were rejected, 298 cases were pending for which decision has to be taken.

## Objectives

In order to avert agrarian distress and farmer suicides, the Government of India launched several programmes. The prominent among them is Prime Minister's Rehabilitation Package (PMRP) that was launched in September, 2006 in 31 suicide prone districts covered in four states namely Andhra Pradesh, Maharashtra, Karnataka and Kerala with a budget allocation of Rs. 16,978 crores. The package was designed to meet the short and long term needs of the distressed farmers. It also attempted to help farmers who were finding it hard to repay the loans. The package created irrigation facilities, supplied seeds and other inputs. In addition to these, the package provided ex-gratia amount of Rs. 50 lakhs for each district. The distressed farmers of 31 districts found relief to some extent. However, the package did not meet up to the expectations (Bhende and Thippaiah, 2010). The Radha Krishna report (2007) also pointed out that the government did not optimally utilize the fund under PMRP. Some other notable programmes of the central government for improving the income of farmers are Kisan Credit Cards (KCC), revival package for short term cooperative credit structure, concessional interest schemes, interest subvention schemes, interest subvention against negotiable warehouse receipt, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), National Agricultural Development Programme (RKVY), National Mission on Micro Irrigation (NMMI), National Horticulture Mission (NHM), National Mission for Sustainable Agriculture (NMSA), Pradhana Mantri Krishi Sinchaya Yojana, 2015 (PMKSY) and Pradhana Mantri Fasal Bima Yojana (PMFBY), 2016. State had also several programmes for improving the welfare of farmers. Despite all these measures, the farmer suicides remained a major challenge in Karnataka. With this background, the study addressed following specific objectives:

- ▶ To analyse the incidence and spread of farmer suicides in selected states and to map the hot-spots of suicide.
- ▶ To study the socio-economic characteristics, cropping pattern and profitability of victim farm households.

- ▶ To study the causes leading to farmer suicides.
- ▶ To recommend suitable policies to alleviate the incidence of farmer suicides.

## Methodology

The study was mainly based on primary data. A total of 107 victim families belonging to Mysuru, Mandya, Haveri and Belgavi districts of Karnataka were interviewed. Although, the farmers suicides was observed in all the 30 districts of Karnataka, the selected districts had highest number of suicides during 2015-16 constituting one-third of the total farmer suicides in Karnataka. The number of sample (victim) households contacted through the survey represented seven per cent of the total farmer suicides and 14 per cent to the compensated victim households in Karnataka during 2015-16 agricultural year. The data collected was analysed using descriptive statistics.

## Findings

The main findings are presented under the following headings:

### Household characteristics, cropping pattern and production structure

- ▶ The sample covered victims of all age groups and category of farmers in terms of operational holding size. Nearly 83 per cent of the victims were in the age group of 31 to 60 years and 80 per cent belong to marginal and small farmers.
- ▶ Nearly one-third of the victims were illiterates and there were few instances of degree and diploma holders as well. About 93 per cent of the victims were married and had 2 to 3 children.
- ▶ Net income derived from agriculture in case of 22 per cent of victims was not enough to meet the basic needs; the income of 45 per cent were in hand-to-mouth situation.
- ▶ Cropping pattern was confined mainly to Kharif season. The suicide incidents was reported in all the crops grown by the victims. Majority of the victims had grown cash crop mainly tobacco and sugarcane.
- ▶ Half of the debt was for non-farming purposes like medical, education of children, marriages and housing.
- ▶ The tobacco cultivators of Hunsur and Periapatna taluks were in a vicious circle of debt and had accumulated huge debt burdens as they were unable to repay loan due to low productivity and income.

- ▶ Farmers of Mandya and Belgavi districts were more inclined to sugarcane cultivation as they had assurance from the sugar factories to buy the produce. But the undue delay in payment by the sugar factories was deterrent to improve their economic conditions. Commercial Banks and Cooperatives was the first preference of sample victims for credit. But they were unable to repay the loans as per schedule due to crop failures. Since they did not had any allied activities, crop failure was a big economic setback. For this reason, they could not raise further loans from institutional sources and relied on private money lenders at exorbitant interest rates of even at 36 per cent per annum.

### Causes of farmer suicides

- ▶ Decision to commit suicide by any victim cannot be attributed to a single reason. The final action of committing suicide was a combination of several causes which can be grouped into social, farming and debt related.
- ▶ Indebtedness was usually the trigger for the unfortunate decision by the victims. However, a close look reveals that failure of rain, lack of irrigation facilities and attack of pests and diseases together is much bigger cause than crop loan, which resulted in crop failure.
- ▶ Crop failure was the major cause of suicide as mentioned by 95 per cent of the victim households. Since the crop failed, the victims were worried about the crop loan. Pressure by private money lenders and recovery notices from institutional sources was also the indicated reasons.
- ▶ Further, non-availability of credit from institutional and non-institutional sources as they have already availed the loan, which makes them helpless and decide to commit suicide.
- ▶ Expectations of higher output, prices and loan waiving are also the reasons to commit suicide. High Price expectation for their crops which are often not met is one of the reasons that urge farmers to commit suicides.
- ▶ Nearly 90 per cent of the victims did not display any symptoms indicating the possibility of committing suicide, as per the observations of their family members. Victims behaved normal as they were consuming food, mingling with their family member, neighbors and fellow farmers. Therefore, it is evident that the decision is always very confidential and personal and it also supports the well-argued “individualization” of the farmer under the pressure of market behavior and commercialization.

### Impact of farmer suicides on victim households

- ▶ Absence of the bread-winner in the house is the main impact. Nearly 35 per cent of the households have indicated that this fact cripples the household totally. These families had

to starve as the land was already under the control of the private money lenders and the children were not in the age to undertake cultivation.

- ▶ Around 30 per cent of the victim families had developed severe resentment towards agriculture that they completely stopped agriculture and looked out for other alternatives for livelihood.
- ▶ Feeling of insecurity and depression was also a visible impact. In fact, some of the family members were so depressed that they were not ready to provide information.
- ▶ The question of selling land was possible only by three per cent of the victim households as many victims had mortgaged the land before committing suicide. The victim households had no asset worthy of selling. Hence, the impact in terms of selling the land or other assets was not a visible impact.
- ▶ There were few instances of discontinuation of education of children due to the death of head of household.

### Policy Suggestions

Indebtedness, frequent crop failure due to vagaries of monsoon, absence of assured water resources and attack of pest and diseases are the most important causes of farmers' distress which untimely leads to suicide. Fragile agri-system with lack of irrigation and assured price and lack of efficient support delivery system came out clearly as the triggering factor. These causes are common to all the sampled districts. Based on finding of the study, the following policy suggestions are offered:

- ▶ Crop failure was found to be the root cause for farmer suicides. Therefore, it is suggested that individual farmers should be brought under the ambit of crop insurance. More intensively the State Government must ensure through the proper policy framework that indemnity be paid within a week after reporting of the crop failure. Payments made months after the failure pushes the farmer into the debt trap.
- ▶ Risk hedging through crop and enterprise diversification should be encouraged to reduce farmers distress/risk aiming at sustainable income.
- ▶ Expectations of higher price was another major cause for suicide. Hence, there is a need for government intervention through MSP covering cost of production plus reasonable profit margin. This can be assured through a well-designed Income Insurance Scheme covering both yield and price risk as followed in the United States.
- ▶ Non-payment or delay of money to the producers by buyers (in the case of sugarcane procurement) should be avoided through designing suitable institutional mechanism.

- ▶ The condition of the victim households had worsened post-suicide of main family member. Hence institutional mechanism for post-suicide care is required.
- ▶ Proper usage of the compensation amount received by the victim households must be ensured. About 50 per cent of the total compensation must be used in recovering the loan amount so that the burden of outstanding amount on the HH can be reduced. Remaining amount can be extended to the victim households for investing in income generating activities. Assistance by the agriculture department is required for efficient utilisation of funds.
- ▶ One of the main causes for farmer suicides was low price for their produce. The producers share in consumer rupee was meager and share must be ensured at 50 per cent of the consumer price. This could be achieved through encouraging direct selling and involvement in value chain activities. In this context, special efforts from agriculture and allied departments is required.
- ▶ The thought of committing suicide was momentary. Several suicides can be averted by establishing a '*Farmers Welfare Cell*' with good amount of rolling fund at the disposal and the farmer representatives on the governing body could be constituted. The cell can provide counselling at that moment and necessary financial assistance for meeting the pressing needs upon verification/scrutiny. This should be connected through a hot line working 24/7 and with mandated response time less than one hour. NGOs, religious institutions, agriculture and horticulture department should also be involved in providing counselling to farmers.
- ▶ Regulating the informal credit market through licensing and fixing the norms for charging interest rate and terms of lending is required. There is a need to create indemnity to non-institutional borrowers. Radhakrishnan Committee recommendations (2007) regarding rural informal credit market should be followed, which underlines the need for mitigating the burden of farmers' indebtedness to money lenders. It recommends a one-time measure of providing long-term loans by banks to farmers to enable them to repay their debts to the moneylenders. Further, it recommends that Panchayat Raj Institutions (PRIs), civil society organizations like farmers' collectives and Non-Governmental Organizations (NGOs) should be involved in arriving at negotiated settlements with the moneylenders.
- ▶ Higher number of farmer suicides occurred in resource rich districts like Haveri (125), Mandya (118), Mysuru (113), whereas the resource poor (drought prone) districts exhibited relatively lesser number of suicides. This might be due to the ability of farmers in resource poor regions to cope up with agrarian distress and their awareness of alternate choices. Such farmers are seen to have evolved over a period of time with various strategies that can successfully help them to manage the stress conditions. On a contrary the farmers from resource rich areas are left with less options to take up. For instance in command areas, main crops were paddy and sugarcane and during water crisis, they hardly have any other option to sustain the crop since



techniques like drip irrigation and mulching are not viable options. Hence capacity building on coping strategies should be given to resource rich regions as well.

- ▶ The victim families should be given preference in availing benefits from various developmental schemes atleast for a period of five years. Such schemes may also include social welfare schemes.
- ▶ The issue of farmer suicide should not be sensitized much through print and electronic media as it might influence other farmers to surrender to suicide.



Field visit - Mysuru District



## Chapter I

### INTRODUCTION

#### 1.1. Background

Farmer suicide has turned out to be a major socio-economic concern in India that has resulted in profound implications on the quality of life of farmers. According to the United Nations Commission on Sustainable Development (UNCSD), one farmer committed suicide every 32 minutes between 1997 and 2005 in India. The prominent causes recognized for farmer suicides were bankruptcy or indebtedness (20.6%), family problems (20.1%), failure of crops (16.8%), illness (13.2%) and drug abuse/alcoholic addiction (4.9%) (NCRB, 2015).

Farmers feel a repeated sense of hopelessness due to the loss of crops, income and land. Another factor that increases suicides is the social isolation due to the loss of communities as well as geographical remoteness. Lack of access to mental health services in rural areas and the stigma attached to treatment is also a contributing factor. Depression arising from exposure to agricultural chemicals/pesticides may increase the risk for mood disorders and ultimately suicide.

The Situation Assessment Surveys of the National Sample Survey Organization (NSSO, 2013) has reconfirmed the worsening situation of farm households which indicated that 60 per cent of the farm households in India are indebted. Indebtedness was highest in Telangana (89%), followed by Karnataka (77%), Maharashtra (57%), Madhya Pradesh (46%) and Chhattisgarh (37%) (Table 1.1). It is to note that NSSO in its 59<sup>th</sup> round survey has revealed that given the choice, 40 per cent farmers would like to quit farming because it is not profitable, risky and it lacks social status (NSSO, 2005). Interestingly, indebted farmers have taken higher credit from institutional sources (60%) as compared to non-institutional sources (40 %) (NSSO, 2013).

**Table 1.1. Number of suicides and indebtedness in major suicide prone states of India**

State	Number of Suicides in 2014	% of farmer Suicides to all India total in 2014	% of indebted farm HH to total farm HH 2012-13
Maharashtra	2,568	45.5	57.3
Telangana	898	15.9	89.1
Madhya Pradesh	826	14.6	45.7
Chhattisgarh	443	7.8	37.2
Karnataka	321	5.7	77.3
<b>Total</b>	<b>5056</b>	<b>89.5</b>	<b>51.9</b>

Source: NCRB, 2015 & Gol, 2013

The Intelligence Bureau in its report to the Govt. of India had mentioned that there is an upward trend in the number of farmers resorting to the extreme measure of suicide in Maharashtra, Telangana, Karnataka and Punjab. The report also stated that the main reason for such incidences were both natural and man made factors: *“While natural factors like uneven rains, hailstorms, droughts and floods adversely affect crop yield, man made factors such as pricing policies and inadequate marketing facilities result in post-harvest losses”* (Gol, 2014).

The NCRB publication of 2014 reported 5056 farmer suicides in the country. Of this, Maharashtra, Telangana, Madhya Pradesh, Chhattisgarh and Karnataka states together accounted for 89.5 per cent of the total farmer suicides as per the details presented in **Table 1.1**.

According to the report, the land holding status of the farmers who committed suicide revealed that 44.5 per cent and 27.9 per cent of victims were small farmers and marginal farmers, respectively. These two category of farmers together accounted for 72.4 per cent of total farmer suicides in the country. The report further revealed that 53.1 per cent and 14.5 per cent of small farmers who committed suicides were reported in Maharashtra and Telangana respectively during 2014. Among marginal farmers, 39.7 per cent and 25.5 per cent respectively were reported in Maharashtra and Madhya Pradesh.

## 1.2. Review of literature

Many studies have addressed to reasoning of the suicides from various angles. A detailed perusal of the literature in India suggests multiple causes and these could be clubbed into one namely increasing distress in the farm sector. This may be due to squeezing income under the pressure of increasing cost of cultivation and higher cash needs of the family. This is further aggravated by the climatic factors, low productivity and market failures both in factor and product markets. But among these the farm indebtedness is considered as the major triggering factor in most of the cases. The scenario of indebtedness in the country also supports this hypothesis.

Most studies on suicides fail to look at the phenomena from an interdisciplinary perspective. Emile Durkheim (1896) a sociologist highlighted that suicide rates are dependent upon the degree to which individuals are integrated into society and the degree to which society regulates individual behavior. He mentioned that in the modern society there are two major types of suicides :(i) Increasing detachment from others resulting to egoistical suicide. For instance, the unmarried and childless are less integrated and hence susceptible to a higher suicide rate and (ii) Dissatisfaction in relation to expectations resulting in anomic suicide. For instance in times of price crash of crops, there is more probability of suicides if the farmers' price expectations are not met (Lester, 1994 cited in Deshpande and Saroj Arora, 2010). Taking into account Durkheim's types, Mohanty in his article views farmer suicides as having resulted from a combination of ecological, economic and social crisis. He pointed out towards modern agricultural practice, which has become an

independent, household or family enterprise, without requiring any link and interaction among the cultivators themselves (Mohanty, 2013).

Another way of analysing the causes of suicides requires understanding the culmination of four factors namely, Events, Stressors, Actors and Triggers. This categorization stems from the mental set up of victims (Deshpande, 2002). The events such as crop loss, bore-well failure, price crash, family problems, property disputes and daughter's marriage act as stress creators, when two or more events cluster together. Usually illness of the individual or any family members, heavy borrowing, continued disputes in the family or land related problems act as stressors'. These become lethal in combination with the events, but further ignition comes through the actors and triggers incidence. Given this complex nature of the phenomena, it is certainly difficult to pinpoint one particular reason for the suicide (Deshpande, 2002).

The work of Gupta aptly observes that *"Indian agriculture has always lurched from crisis to crisis"*. If the monsoons are good then there are floods, if they are bad there are droughts, if the production of mangoes is excellent then there is a glut and prices fall, if the onion crops fail then that too brings tears. The artisanal nature of agriculture has always kept farmers on tenterhooks, not knowing quite how to manage their economy, except to play it by (y) ear thus shedding a light on the plight of the Indian farmer (Gupta, 2005). The study on farmers' suicides is a problem of the type that is theoretical and interpretative in nature. Although there is an availability of empirical data, due to a lack of sufficient understanding of the trends and complex patterns, there exists a deficiency in establishing interrelationships (Kaviraj, 1984).

Vasavi states that bewilderment, loss of meaning and uncertainty among farmers due to the unrelenting failures of policies and responses are doubtful to change unless there is a paradigm shift in the general outlook that starts with trusting agriculturists' knowledge and working towards those elements that enhance their capacities for collective action (Vasavi, 2012).

The study by Bhende and Thippaiah (2010) concluded that farmers in the suicide-prone districts of the Andhra Pradesh, Karnataka, Kerala and Maharashtra states were aware of the PMs package and the department of agriculture, gram panchayats and others had given due publicity to this programme. Farmers had availed of relief measures such as interest waiver and rescheduling of loans and also subsidy under various schemes, which enabled them to be eligible for fresh loans and augment their incomes through subsidiary activities. The study also revealed that collusion between local leaders and government officials, which had led to wealthy farmers receiving ex-gratia payment bypassing the poor. Most of the farmers in the suicide-prone districts benefited from one or the other scheme of the PM package. However, their capacity to cope with the drought conditions whenever monsoons failed was still weak and the PM's package through its multiple schemes had limited impact on this front.

Anneshi and Gowda (2015) concluded that both small and large farmers borrowed relatively higher proportion from the non-institutional sources compared to institutional sources and accessibility to institutional borrowing was relatively more for large farmers. Similarly, both small and large farmers owed more outstanding debt to non-institutional sources, as compared to institutional sources in SC/ST category.

Bhende (2015) in the study on impact assessment of Prime Minister's Rehabilitation Package for farmers in suicide-prone districts of Karnataka concluded that farmers in the suicide prone districts received benefit for one or more components under PM package. The direct assistance provided in the form of certified seed and supply of sprinkler and drip irrigation had helped in increasing the yield and irrigated area.

Macharia (2015) investigated that majority of small and marginal farmers depend on non-institutional credit facilities (i.e. money lenders, micro financiers and traders). He also reported that farmers' suicides take place among the scheduled castes and tribe families who cultivated commercial crops. Low yields, extremely reduced profits and mounting debts make their life extremely difficult.

Chikkara and Kodan (2014) opined that the informal mechanism of credit delivery played an important role for marginal and small farmers in meeting their credit requirements in the state of Haryana. In addition, maximum indebtedness among farm households was found to be in the range of Rs. 615-775 Monthly Per Capita Consumption Expenditure (MPCE).

Kanthi (2014) in his study on economics of agriculture and farmers' suicides in Warangal District in Andhra Pradesh reported that the contributory factors for farmers suicides as farmers indebtedness, crop loss and failure and risk factor, input (seed, fertilizers, pesticides, irrigation, credit) related problems, inadequate institutional finance, failure of agricultural extension system lack of storage and marketing facilities, lack of remunerative prices and absence of agricultural insurance.

Mohanty (2014) in a study conducted in Amravati and Yavatmal districts of Maharashtra argued that crop loss and egoistic factors led to suicidal tendency among small and marginal farmers. On the contrary, the suicides of large and medium farmers who belong to higher castes were attributed mainly to the anomic forces generated by failure in business, trade and politics. The socio-cultural factors such as old age, illness, family tension, etc, further added their urge to take their own lives. They concluded that the suicides of farmers are neither properly anomic nor egoistic rather they are ego-anomic in nature.

Singh *et al.*, (2014) in Punjab studied that the level of education, non-farm income, farm size and non-institutional credit were the main factors which affect the level of farmers' indebtedness. They also found that the farmers face a large number of problems in availing institutional credit

which drives them to fall into the debt trap of the crafty and exploitative non-institutional sources of credit.

Kumar *et al.*, (2010) examined the performance of agricultural credit flow and has identified the determinants of increased use of institutional credit at the farm household level in India. The result indicated that the quantum of institutional credit availed by the farming households was affected by a number of socio-demographic factors which include education, farm size, family size, caste, gender, occupation of household, etc.

Another study by Behere and Behere (2008) reported that various factors like chronic indebtedness and the accumulation of inability to pay interest over years and economic decline grain drain and the rising costs of agricultural inputs and falling prices of agricultural produce lead to complications and family disputes, depression and alcoholism etc, and eventually are responsible for suicides among the farmers. It was also seen that compensation following suicide helped the family to repay debt. They also opined that the causes are multi factorial, cumulative, repetitive and progressive, leading an individual to a state of helplessness, worthlessness and hopelessness, obviously influenced by his social strengths and weaknesses along with his mental health status.

According to Meeta and Rajivlochan (2006) some of the problems common among the victims of suicide were (a) hopelessness in being unable to resolve the dilemmas of personal life and an inability to find funds for various activities or repay loans; (b) the absence of any person, group, or institution to whom to turn to in order to seek reliable advice - whether for agricultural operations or for seeking funds or for handling private and personal issues; (c) little knowledge about institutional mechanisms like the Minimum Support Price (MSP) that would affect marketing, technical knowledge and no reliable sources from where such knowledge and advice could be accessed; and (d) chronic alcoholism and drug abuse among the rural population.

Mohanty and Shroff (2004) revealed that though crop losses, indebtedness and market imperfections cause economic hardship to farmers; social factors are also at work which leads in some cases to their suicides.

Sarah Hebous and Stefan Klonner empirically analyzed the various sources of extreme economic distress in rural India by using district-level data on farmers' suicides to estimate the effects of transitory economic shocks and structural change in agriculture on the incidence of suicides in farm households. Rainfall conditions are used as an instrumental variable and it was found that transitory spikes in poverty caused by a lack of rainfall increase suicides among male and decrease suicides among female members of farm households. However, the study concludes that the combined causal effect of a poverty shock on suicides in farm households was found to be positive. Also, a shift from subsistence crops to cash crops, especially cotton, was found to be associated with a decrease in male suicides (Hebous and Klonner, 2014).

### 1.3. Objectives

Concerned with the agrarian crisis and farmers' suicides in suicide prone states of India, on July 1, 2006, the government announced a rehabilitation package with the goal of mitigating the distress driven condition of farmers. The rehabilitation package aimed at establishing a sustainable and viable farming and livelihood support system through debt relief measures to farmers such as complete institutional credit coverage, crop centric approach to agriculture, assured irrigation facilities, effective watershed management, better extension and farming support services and subsidiary income opportunities through horticulture, livestock, dairying, fisheries and other subsidiary activities. In order to alleviate the hardships faced by the debt driven families of farmers, ex-gratia assistance from Prime Minister's National Relief Fund (PMNRF), and 50 lakh per district was also provided. Some other programs to increase flow of agricultural credit include Kisan Credit Cards (KCC), revival package for short term cooperative credit structure, concessional interest schemes, interest subvention schemes, interest subvention against negotiable warehouse receipt and so on. Despite all these measures, the farmer suicides remain major challenge in India.

*With this background, the study addressed following specific objectives:*

- ▶ To analyse the incidence and spread of farmer suicides in selected states and to map the hot-spots of suicide.
- ▶ To study the socio-economic profile, cropping pattern and profitability of victim farm households.
- ▶ To study the causes leading to farmer suicides.
- ▶ To recommend suitable policies to alleviate the incidence of farmer suicides.

### 1.4. Data and Methodology

Annual publication by National Crime Records Bureau (NCRB) is the only primary source of data on farmer suicides in the country. The publication of NCRB for the year 2014 under the title "Accidental deaths and suicides in India - 2014" is the latest data source available. Only in this latest publication, the number of suicides of agricultural laborers and farmers was furnished separately. In all other previous publications, NCRB had recorded both these categories as self-employed. However, the publication has not disaggregated the data at district level. The NCRB publication served as the source for data at all India level. The source for farmer suicides data for Karnataka state was furnished by Department of Agriculture, Karnataka. The primary data was collected from victim households (HHs) using Multi-stage random sampling.



The data of Agricultural Department of Karnataka has been used for selection of victim families for primary data. Between the periods from 1<sup>st</sup> July, 2015 to 30<sup>th</sup> June, 2016, the agriculture department had reported 1490 farmer suicides. It may be mentioned that the agricultural department has list of only those victim households who have sought financial compensation from government. Hence, district level secondary data used for Karnataka for all purposes is limited to that extent.

Without exception, there were cases of farmer suicides in all the 30 districts of the state. However, half of the farmer suicides were reported in only six districts out of 30 districts of Karnataka. All the districts had at least one suicide and thus there was no district without suicide in the state. It may be mentioned that as per the proposal submitted to Ministry of Agriculture and Farmer welfare, Karnataka was supposed to collect primary data from 50 victim households from two districts which had highest number of suicides. However, looking into to the high number of suicides, it was felt essential to increase the sample size. Thus, against the proposed number of two districts, the survey was conducted in four districts namely Mysuru, Mandya, Haveri, and Belgavi which constituted 31 per cent of the total farmer suicides in the state. Accordingly, the number of sample households was also doubled to reach a size of 107 victim households instead of earlier proposed number of 50 victim households. Further, details like names of the taluks covered in each district, number of villages visited and number of victim households interviewed is given in **Table 1.2**.

The number of sample victim households added to around seven per cent of the total number of 1490 farmer suicides that were reported in Karnataka during the period from 1<sup>st</sup> July, 2015 to 30<sup>th</sup> June, 2016 which is termed as reference period for the study. All other data collected from the victim households through a questionnaire designed for the survey was for the same reference period. All the selected victim households had been compensated at the rate of Rs.5 lakhs per household. Therefore, the sample size was around 14 per cent of the total number of 784 victim households who were compensated. The selected sample victims were either cultivating their own land or/and on lease basis at the time of survey. Thereby, the suicide case of agricultural laborers was outside the purview of this study. The primary household data questionnaire designed for the survey covered basic data such as family details, land holding details, expenditure pattern and credit details. In addition to this, families were enquired about causes and impacts of suicide and suggestions for overcoming suicides were asked as well. The study comprised of victims committed suicide due to farming related causes and received compensation. The victims whose compensation was pending were also not interviewed since the reason for suicide was yet to be confirmed. The study mainly concentrated on addressing the various farming related issues that are associated with farmer suicides. The socio economic and other such characteristics across the various farm families widely vary. Thus, the study focused on victim households only. No classification as control and victim households was made as this would lead to the selectivity bias and hence comparison may not represent the true picture.

Table 1.2. Sample size

Sl. No.	Name of the selected District	Name of the Selected Taluk	No. of villages covered	No. of victim households interviewed
1	Mysuru	Hunsur	7	8
		Periapatna	12	12
		Krishna Raj Nagar	7	7
		Total	26	27
2	Mandya	Mandya	11	13
		Maddur	13	14
		Total	24	27
3	Haveri	Haveri	7	8
		Hirekerur	10	10
		Ranibennur	9	9
		Total	26	27
4	Belgavi	Belgavi	4	4
		Bailahongla	3	3
		Savadatti	12	12
		Athani	5	7
		Total	24	26
	Total		100	107

## 1.5. Structure of the Report

This study is organized into five chapters. The first chapter focuses on background of study, review of literature, objectives, and data and methodology used for the study. The scenario of farmer suicides in Karnataka is covered in second chapter. The socio-economic profile of victims and their family members, land holding, cropping pattern, particulars of credit are presented in Chapter three. Chapter four presents the causes and impacts of farmer suicides and suggestions to prevent suicides as well. The last chapter presents the major findings and policy suggestions.

## Chapter II

### FARMER SUICIDES SCENARIO IN KARNATAKA

#### 2.1. Intensity of farmer suicides in Karnataka

National Crime Records Bureau (NCRB) is the authentic data source for compiling state-wise farmer suicides in the country. The latest available publication is for the year 2014 under the title “*Accidental deaths and suicides in India - 2014*”. Only in this latest publication, the number of suicides of agricultural laborers and farmers is provided separately. In all previous publications, starting from the year 2000, NCRB had recorded agriculture which is farmers plus agricultural laborer. According to this data of NCRB, during the last 15 years from 2000 to 2014, in Karnataka, there had been 30604 incidences of suicides belonging to agriculture. This works out to an average of 2040 suicides reported in agriculture and 13 per cent of the total number of suicides in agriculture in India. The following **Figure 2.1** depicts the number of suicides reported in agriculture in Karnataka for the last fifteen years. The percentage of suicides reported in agriculture in Karnataka continued to remain between 13 to 15 per cent of the total farmer suicides at all India level. The efforts of central and state government can be clearly seen from the declining trend in number of farmer suicides overtime.

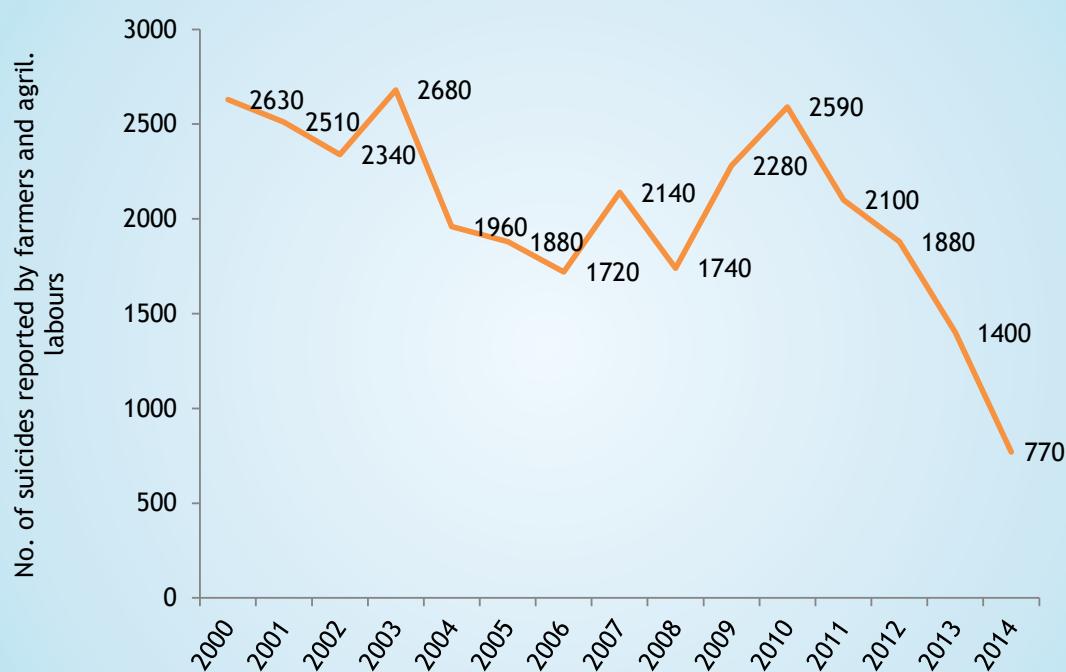


Figure 2.1. Suicides reported in agriculture in Karnataka

The district-wise farmer suicides in Karnataka are presented in **Table 2.1**. Within a span of year from 1<sup>st</sup> July, 2015 to 30<sup>th</sup> June, 2016, there were 1490 farmer suicide incidents in Karnataka as per the reports received by Department of Agriculture, Karnataka. This works out to around four farmer suicide cases per day in the state. It can be clearly seen from the table that four districts namely Haveri, Mandya, Mysuru and Belgavi accounted for about 31 per cent of the total farmer suicides in Karnataka. The remaining 26 districts accounted for 69 per cent farmer suicides. Not even a single district of the state was without suicide case during the agricultural year, 2015-16. During the same period, the intensity of suicides has been 15 farmers for every lakh hectare of net sown area, 12 per lakh hectare of gross sown area and 19 farmers resorted to suicide for every lakh of farming families.

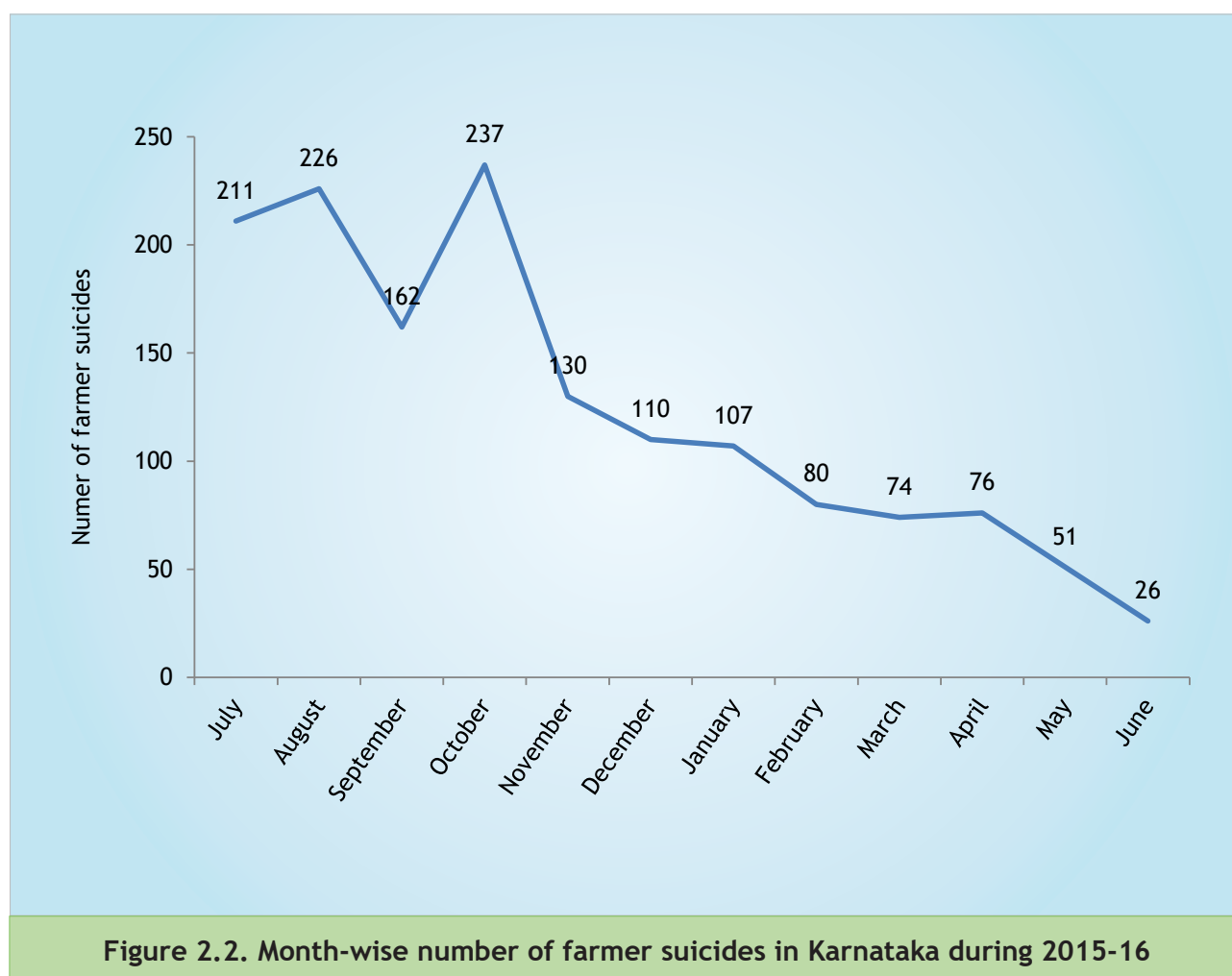
It is visible from farmers suicide data available for Karnataka that highest number of farmers suicides occurred in well developed and resource rich districts like Haveri (125), Mandya (118), Mysuru (113) whereas the drought prone districts exhibited relatively less number of suicides. This might be due to the ability of farmers in dry districts to cope up with agrarian distress and their awareness regarding the alternate choices available during dry spells. Such farmers are seen to have evolved over a period of time with various strategies that can successfully help them manage the stress conditions. On a contrary the farmers from resource rich areas are left with less options to take up. For instance in command areas, the main crop is usually paddy and during water crisis, they hardly have any other option to sustain the crop since techniques like drip irrigation and mulching are not practical options. Hence creating awareness regarding various other options available for means of survival and imparting training to such farmers on various skills has to be made.

The gravity of suicide cases in Mandya has been extremely high at 62 suicides per lakh hectare of net sown area and 49 farmer suicides per lakh hectare of gross sown area. Haveri district had the highest of 57 suicide cases per lakh of farming families. It is not surprising to know that 80 per cent out of 1490 number of farmer suicides that occurred during the agricultural period 2015-16 in Karnataka was committed by marginal and small farmers. The Kharif season of 2015 was the most tragic season for Karnataka. The peak of farmers' frustration to the degree of committing suicide was during the four months of Kharif from July, 2015 to October, 2015 which recorded 56 per cent of total suicides during 2015-16 agricultural year (**Figure 2.2**). Nearly half of the farmers suicides during kharif season was concentrated in eight districts namely Mandya (8.84%), Haveri (7.54%), Tumkuru (7.06%), Belgavi (6.22%), Hassan (5.86%), Mysuru (5.50%), Raichur (5.14%) and Chitradurga (4.78%).

Table 2.1. Details of Farmer suicides in Karnataka from 1<sup>st</sup> July, 2015 to 30<sup>th</sup> June, 2016

Sl. No.	Name of the district	No. of farmers' suicide	% to state total	No. of farmer suicides per lakh ha. of Net Sown Area	No. of farmer suicides per lakh ha. of Gross cropped area	No. of farmer suicides per lakh farming families
1	Haveri	125	8.40	35	29	57
2	Mandya	118	7.92	62	49	30
3	Mysuru	113	7.58	31	22	29
4	Belagavi	112	7.52	17	12	21
5	Kalaburagi	75	5.03	9	7	19
6	Hassan	74	4.97	20	17	17
7	Chikkamagalur	74	4.97	25	21	33
8	Tumakuru	72	4.83	15	13	17
9	Raichur	69	4.63	13	10	21
10	Chitradurga	69	4.63	18	15	24
11	Yadgir	60	4.03	18	14	26
12	Dharwad	60	4.03	21	13	42
13	Shivamogga	60	4.03	26	23	28
14	Bidar	54	3.62	15	12	22
15	Vijayapura	47	3.15	6	5	14
16	Davanagere	46	3.09	12	10	16
17	Gadag	44	2.95	12	8	27
18	Koppal	35	2.35	9	7	16
19	Ramnagar	31	2.08	19	18	11
20	Bagalkot	30	2.01	6	5	13
21	Bellary	29	1.95	7	6	11
22	Chikballapur	23	1.54	12	11	11
23	Uttara Kannada	14	0.94	13	11	7
24	Kolar	11	0.74	6	6	5
25	C.R.Nagar	10	0.67	6	5	5
26	Bengaluru (Rural)	9	0.60	8	8	5
27	Dakshina Kannada	9	0.60	7	6	4
28	Udupi	9	0.60	9	8	4
29	Kodagu	7	0.47	4	4	10
30	Bengaluru (Urban)	1	0.07	2	2	1
	<b>Total</b>	<b>1490</b>	<b>100.00</b>	<b>15</b>	<b>12</b>	<b>19</b>

Source: Department of Agriculture, Government of Karnataka (2016)



## 2.2. Details of Compensation

Based on the **Dr. G.K. Veeresh committee** report, an amount of Rs. One lakh was paid as compensation to the households of those farmers who committed suicide during 2003-04 (GoK, 2002). Subsequently, effective from April 2015, the compensation amount was increased to Rs.2 lakhs per victim household. But the amount was later revised to Rs.5 lakhs in October 2015. The district-wise details of compensation for the year 2015-16 are given in **Table 2.2**. Out of the total reported farmer suicides in Karnataka (1490), 53 per cent of the cases have been accepted for giving compensation as the suicides have happened due to farming related reasons. A compensation of Rs.5 lakh has been distributed to these victim households amounting to Rs.3920 lakhs for the entire state. It is to note that in the case of 20 per cent of the victims the decision is pending regarding compensation and for 27 per cent of the victims the applications have been rejected. This rejection was due to non-farming related causes for committing suicides.



Table 2.2. Details of compensation during 2015-16

Sl. No.	Districts	Reported (No. of cases)	Accepted (No. of cases)	Rejected (No. of cases)	Decided (No. of cases)	Compensation paid at Rs.5.00 lakhs each for accepted cases	Pending (No. of cases)
1	Mandya	118	73	31	104	365	14
2	Haveri	125	56	35	91	280	34
3	Belagavi	112	61	26	87	305	25
4	Mysuru	113	74	15	89	370	24
5	Hassan	74	38	10	48	190	26
6	Tumakuru	72	45	21	66	225	6
7	Chikkamagaluru	74	37	19	56	185	18
8	Chitradurga	69	13	50	63	65	6
9	Kalaburagi	75	44	21	65	220	10
10	Raichuru	69	22	19	41	110	28
11	Yadgiri	60	42	11	53	210	7
12	Bidar	54	44	4	48	220	6
13	Shivamogga	60	27	18	45	135	15
14	Darawada	60	30	23	53	150	7
15	Davanagere	46	14	21	35	70	11
16	Vijayapura	47	29	7	36	145	11
17	Gadag	44	17	14	31	85	13
18	Koppala	35	9	15	24	45	11
19	Ramnagar	31	22	1	23	110	8
20	Bellary	29	18	9	27	90	2
21	Bagalakot	30	20	5	25	100	5
22	Chikkaballapura	23	10	13	23	50	0
23	Kolar	11	8	0	8	40	3
24	Uttara Kannada	14	8	3	11	40	3
25	Bengaluru (Rural)	9	4	3	7	20	2
26	Dakshina Kannada	9	0	7	7	0	2
27	Udupi	9	6	2	8	30	1
28	Chamarajanagar	10	8	2	10	40	0
29	Kodagu	7	4	3	7	20	0
30	Bengaluru (Urban)	1	1	0	1	5	0
	<b>Total</b>	<b>1490</b>	<b>784</b>	<b>408</b>	<b>1192</b>	<b>3920</b>	<b>298</b>

Source: Department of Agriculture, Government of Karnataka (2016)

## Chapter III

### SOCIO-ECONOMIC CHARACTERISTICS AND CROPPING PATTERN

Results of the primary data on socio-economic profile of the victim households are presented in this chapter. Additionally, cropping pattern and the income derived from agriculture and the credit burden faced by the victim households are also covered in this chapter.

#### 3.1. Socio-economic characteristics of victims

The socio-economic profiles of the victims are presented in **Table 3.1**. Efforts were made to interview the person who is closely related to the victim for collecting the realistic information. Out of the 107 victim farm HH, 70 per cent of the information has been collected from wife or son or daughter of the victim and the remaining from brother or sister or others who are closely connected to the victim. Nearly 96 per cent of the victims are male farmers who are also main income earners of the family. The social status of the farmers indicate that 57 per cent of the victim farmers belong to backward category, 29 per cent to general group and 14 per cent to SC and ST category. Most of the victims belong to the Hindu religion. Around 83 per cent of the victims were holding BPL cards but this does not imply that poverty was a major cause for suicide.

Farmers falling under the age group between 31 and 60 years (83%) had witnessed higher suicides as compared to other age groups. The level of education is inversely related to incidents of the farmer suicides. The educational status of the victim indicates that higher percentage of suicide victims belong to illiterate (35%) category. About 50 per cent of the victims have had formal schooling up to 10<sup>th</sup> standard. Thus showing the importance of level of education in reducing the farmer suicides. The marital status shows that 93 per cent of the victims were married and mostly married among the relatives with the consent of the parents (i.e. arranged). Most of the victim households have one son and one daughter on an average. Nearly 48 per cent of the victims had committed suicide by hanging and 42 per cent by consuming poison or plant protection chemicals. The house (65%) was the main place where farmer committed suicide, followed by farm (25%).

#### 3.2. Socio-economic characteristics of victim households

The socio-economic characteristic of victim households is presented in **Table 3.2**. The family size is one of the indicators of the socio-economic status in addition to land holdings, was around four per victim household. Nearly one-fourth of the family members were children belong to the age group of 15 years. Around 86 per cent of the victim households were nuclear type and 90 per cent were living in the village and only 10 per cent were living in their own farms. Existing literature clearly indicate that the suicides incidents tend to be higher in nuclear families as compared to joint families (Deshpande, 2002; Deshpande and Saroj Arora, 2010), which is in line with the results of this study.

Table 3.1. Socio-economic characteristics of victims

Particulars		Number or %
Type of respondents (% to total sample)		107
Type of respondents (% to total sample)	1. Wives / Sons / Daughters	69.16
	2. Brothers / Sisters / others	30.84
Gender (% to total sample)	1. Male	96.26
	2. Female	3.74
Social status (% to total sample)	1. SC	7.48
	2. ST	6.54
	3. OBC	57.01
	4. General	28.97
APL/BPL/AAY holders	1. APL	5.61
	2. BPL	83.18
	3. AAY	2.80
Religion	1. Hindu	99.07
	2. Muslim	0.93
	3. Christian	0.00
	4. Others	0.00
Age group (% to total sample)	1. Upto 30 years	7.48
	2. Between 31 to 60 years	83.17
	3. Above 60 years	9.35
Years of schooling (% to total sample)	1. Illiterate	34.58
	2. Primary ( 4 years )	11.21
	3. Middle (7 years)	18.69
	4. Matriculation/secondary (10 years)	19.63
	5. Higher secondary (12 years)	12.15
	6. Degree/Diploma (15 years)	3.74
	7. Above Degree (Above 15 years)	0.00
Marital status ( % to total sample)	1. Married	93.46
	2. Un Married	6.54
Type of marriage (% to total sample)	1. Arranged	93.46
	2. Love	6.54
Married to whom (% to total sample)	1. Within relatives	14.95
	2. Outside relatives	85.05
Heirs of the victim (Average No. to total sample)	1. Sons	1
	2. Daughters	1
Method of suicide (% to total Sample)	1. Poison consumption	42.06
	2. Hanging	47.67
	3. Jumping into river / well	4.67
	4. Current shock	0.93
	5. Self-immolation	4.67
Place of suicide (% to total sample)	1. House	65.42
	2. Farm	25.23
	3. Lodge / Hotel	0.00
	4. Others	9.35

About 75 per cent of the victim HH is dependent on farming as a main occupation. Literacy is a key factor to bring about desirable changes in the farmer's outlook towards modern input intensive agriculture. But, nearly 12 per cent of the family members of the victim household had an education of up to seven years and 4.5 per cent of the family members had education upto degree and above.

**Table 3.2. Socio-Economic characteristics of victim HHs**

Particulars			Number or Per cent
Sample size (Numbers)			107
Existing household size: (Average numbers)			4.09
Households depending on farming as a main occupation (% to total sample)			74.52
Family type (% to total sample)		1. Joint	14.02
		2. Nuclear	85.98
Location of the households (% to total sample)		1. Witin the village	90.65
		2. In their own farm	9.35
Age group of family members (% to total sample)		1. Adult Males (>15 yrs)	27.17
		2. Adult Females (>15 yrs)	45.89
		3. Children (<15 yrs)	26.94
Years of schooling (% to total sample)		1. Illiterate	37.44
		2. Primary ( 4 years )	13.47
		3. Middle (7 years)	11.19
		4. Matriculation/secondary (10 years)	19.86
		5. Higher secondary (12 years)	13.70
		6. Degree/Diploma (15 years)	3.20
		7. Above Degree (Above 15 years)	1.14
Farm Size	% of Area	1. Marginal (0.1 to 2.5 ac)	19.60
		2. Small (2.51 to 5 ac)	25.97
		3. Medium (5.1 to 10 ac)	45.72
		4. Large (10.1 and above)	8.71
	% of holdings	1. Marginal (0.1 to 2.5 ac)	59.81
		2. Small (2.51 to 5 ac)	20.56
		3. Medium (5.1 to 10 ac)	17.76
		4. Large (10.1 and above)	1.87
	Average operational holding size (acres per HH)		2.90

The average size of the land holding was 2.9 acres per HH. The marginal farmers operating less than a hectare land occupied 60 per cent share in holdings and 20 per cent share in area. The large farmers, on the other hand, occupied around two per cent share in holdings but they cultivated nine per cent share of the operated area. Medium farmers cultivating 2 to 4 acres of land had occupied 18 per cent of the holdings and cultivated 46 per cent of area. Thus indicating the higher extent of inequity in distribution of land among the victim HHs. The highest number of farmers who had committed suicides belong to marginal and small holdings category (80%).

### 3.3. Characteristics of operational holdings

Characteristics of operational holdings of victim HHs is presented in **Table 3.3**. Around 97 per cent of the victim HHs had owned land and only three per cent were cultivating on lease basis. Nearly half of the households had owned only un-irrigated land and 39 per cent had only irrigated land. In the case of 11 per cent of the households, some portion of the land was under irrigated conditions and some portion was under un-irrigated condition. It can be seen from the table that net operated land was 2.90 acres per victim household, of which 40 per cent was irrigated (1.14 acres/hh). About 18 per cent of the land was leased -in out of the net operated land. This reflects land transactions carried out by the households. The cropping intensity was only 131 per cent which indicated that the farmers were growing less than two crops in a year. This fact is further supported by irrigation intensity which is only 106 per cent for the study area. As anticipated the cropping intensity was relatively higher in irrigated land as compared to the un-irrigated land.

**Table 3.3. Characteristics of operational holdings of victim HHs**

Sl. No.	Land details	Irrigated (per HH in acres)	Un-irrigated (per HH in acres)	Area in acres per HH
1	Total owned land	1.36	1.70	3.06
2	Un-cultivated land	0.06	0.06	0.12
3	Cultivated (Own)	1.30	1.64	2.94
4	Leased-in land	0.21	0.34	0.55
5	Leased-out land	0.37	0.22	0.59
6	Net Operated Area (1-2+4-5)	1.14	1.76	2.90
7	Gross Cropped Area	1.21	1.62	2.84
8	Gross Irrigated Area	1.21	-	1.21
9	Net Irrigated Area	0.64	1.53	2.16
10	Cropping Intensity (%)	131		
11	Irrigation Intensity (%)	106		

### 3.4. Sources of irrigation

The distribution of irrigation by sources is given in **Table 3.4**. Nearly 39 per cent of the net operated area of 2.90 acres had irrigation and the remaining 61 per cent was un-irrigated. The groundwater source accounted for 60 per cent of the total irrigated area and 40 per cent irrigation by surface water indicating the dependency on groundwater for irrigation by the victim HHs. Tube well constituted 57 per cent of the total irrigated area. River and canal were the two surface water sources covering 22 and 18 per cent of the total irrigated area respectively. The access to canal water was mainly in Mandya taluk of Mandya district. The river source was observed in Athani taluk of Belgavi district. However, the sample households had used the river water through sub-surface irrigation. It must be mentioned here that these irrigation sources was dependable mostly for one crop in a year. The victim households mentioned that the discharge capacity of tube wells/bore wells was too low and the surface water source goes dry in the mid of the crop season. This was resulting in crop failure as they could not get sufficient water at crucial stages of the crop growth.

**Table 3.4. Source-wise distribution of irrigated area**

Sl. No.	Particulars	Area in acres per HH	Percent to total sample
<b>A</b>	<b>Irrigation</b>		
1	Irrigated	1.14	39.31
2	Unirrigated	1.76	60.69
	<b>Total Area</b>	<b>2.90</b>	<b>100.00</b>
<b>B</b>	<b>Sources of Irrigation</b>		
1	Open well	0.03	2.63
2	Tube well	0.65	57.02
3	Canal	0.21	18.42
4	River	0.25	21.93
	<b>Total</b>	<b>1.14</b>	<b>100.00</b>
	<b>Total irrigated area (A+B)</b>	<b>4.04</b>	

### 3.5. Leasing of land

The transaction of leasing-in was observed with 21.5 per cent of victim households and leasing-out with 15 per cent. The details pertaining to leased-in and leased-out land are provided in



**Table 3.5.** Many of the victims who were debt trapped were not actually leasing-out, they were pledging the land mainly to money lenders towards the interest dues. The victims with leased-in land were borrowing loan from the money lenders to lease-in the land. They were leasing mainly on cash basis and were expecting to earn more for their families. Thus, there were no well-designed terms for leasing of the land in the study area. The victim households were under the mercy of money lenders. Generally, the farmers were not leasing-out the land voluntarily. It was mainly through compulsion of money lenders.

**Table 3.5. Details of land leasing arrangement**

Sl. No.	Particulars		Irrigated	Unirrigated
1	Leased - in	Area in acres per HH	3.18	5.19
		Rental value per acre (Rs.)	6,786	4,704
2	Leased-out	Area in acres per HH	4.39	2.65
		Rental value per acre (Rs.)	27,200	17,680

### 3.6. Sources of income and expenditure

Sources of income and items of expenditure is presented in **Table 3.6** to know about the financial position of the victim HHs during the last five years period. One of the most important indications of the victim household study is that the farmers are gradually turning towards salary jobs as workers in factories if they are illiterates. Those who are matriculate or 12<sup>th</sup> appeared, take-up some office jobs. This is evident from the **Table 3.6** which shows that around half of the total income of Rs.33000 per household per annum earned from different sources have been received from salary. A two sample test was done to see if the income differs significantly between the marginal and small, and medium and large farmers. The results revealed that there is no significant difference in the means of incomes across the two farm categories at 95 per cent confidence interval with the mean value being 32698 and 37700 for marginal and small, and medium and large farmers respectively.

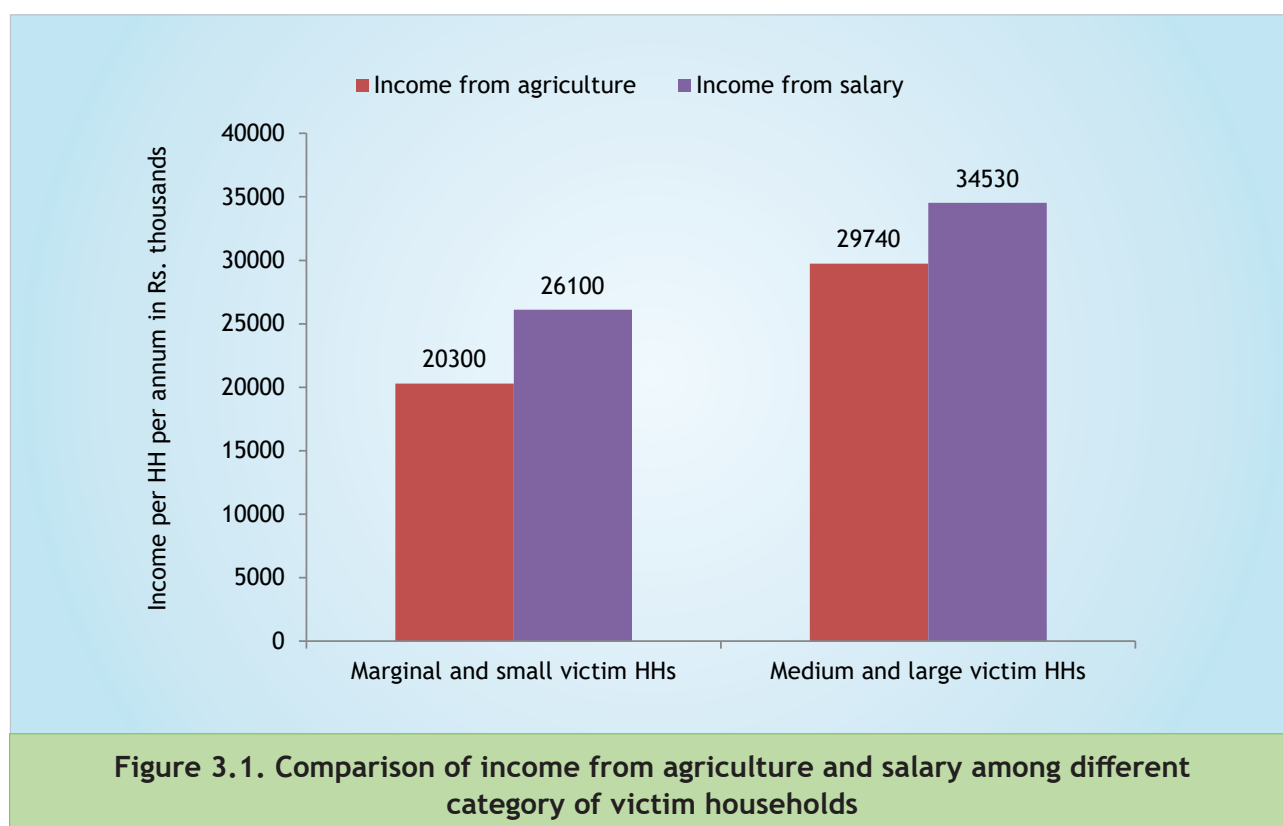
Table 3.6. Particulars of income and expenditure

Sl. No.	Particulars	Amt. per hh in Rs.	% to total	% of hh who thought that the income decreased over the past five years
1	Agriculture	9955	30.09	44.86
2	Agriculture wage income	4192	12.67	3.74
3	Dairy and animal husbandry	1813	5.48	8.41
4	Poultry	0	0.00	0.00
5	Fishery	0	0.00	0.00
6	Service (salary and pension)	16001	48.36	2.80
7	Self business	561	1.70	0.93
8	Tractor renting out	561	1.70	0.00
<b>A</b>	<b>Total income (A)</b>	<b>33083</b>	<b>100.00</b>	<b>60.75</b>
1	Food	12112	60.39	43.93
2	Non-food	7944	39.61	37.38
<b>B</b>	<b>Total expenditure (B)</b>	<b>20056</b>	<b>100.00</b>	<b>40.66</b>
<b>C</b>	<b>Surplus / Deficit (+ / -) A- B</b>	<b>13027</b>		
<b>D</b>	<b>Percent of expenditure to income</b>	<b>60.62</b>		

Note: Data on interest rate was not considered while accounting for expenditure

It may further be seen from table that farming and its allied activities does not stand on par with the per annum income derived by the victim households from salary and self-business. This pattern of dependence on income sources, amply substantiate the fact that farmers are repulsive to agriculture and, given a chance, they would prefer to stay away from agriculture. The reasons quoted by them are: firstly, the income from service or job is more dependable than farming; secondly, they need not have to invest and take economic risks like crop failure due to lack of access to water, pest and disease attack and market risk. While 45 per cent of the victim households opined that the income from agriculture has decreased over the last five years. An in-depth analysis into income sources of victim households revealed that all categories of farmers are having their salary income more than the income from agriculture source which can be seen in **Figure 3.1**.

A general discussion with the farmers of villages, other than the victim households, reconfirmed the negative opinion of farmers about perpetuating agriculture. It was also mentioned that those farmers who had the opportunity to get employed in sectors other than agriculture already left agriculture and took-up the job. The farmers who could not get jobs were either less educated or over aged to get jobs or both. This is reflected in **Table 3.2** which shows that 84 per cent of the victim households were in the age group of 31 to 60 years and 65 per cent had educated only up to seven years of formal education.



### 3.7. Cropping pattern and net returns

Cropping pattern and net returns from cultivation is presented in **Table 3.7**. Lack of assured water resources was the main constraint being faced by the victim households for crop cultivation. Nearly 87 per cent of gross sown area of victim households of Mysuru district depended on rain. In Haveri district, victim households could irrigate only 33 per cent of the total cropped area and it was 57 per cent in the case of victim households of Belagavi district. Comparatively, the situation was better with respect to victim households of Mandya district as they could irrigate 90 per cent of their total cropped area.

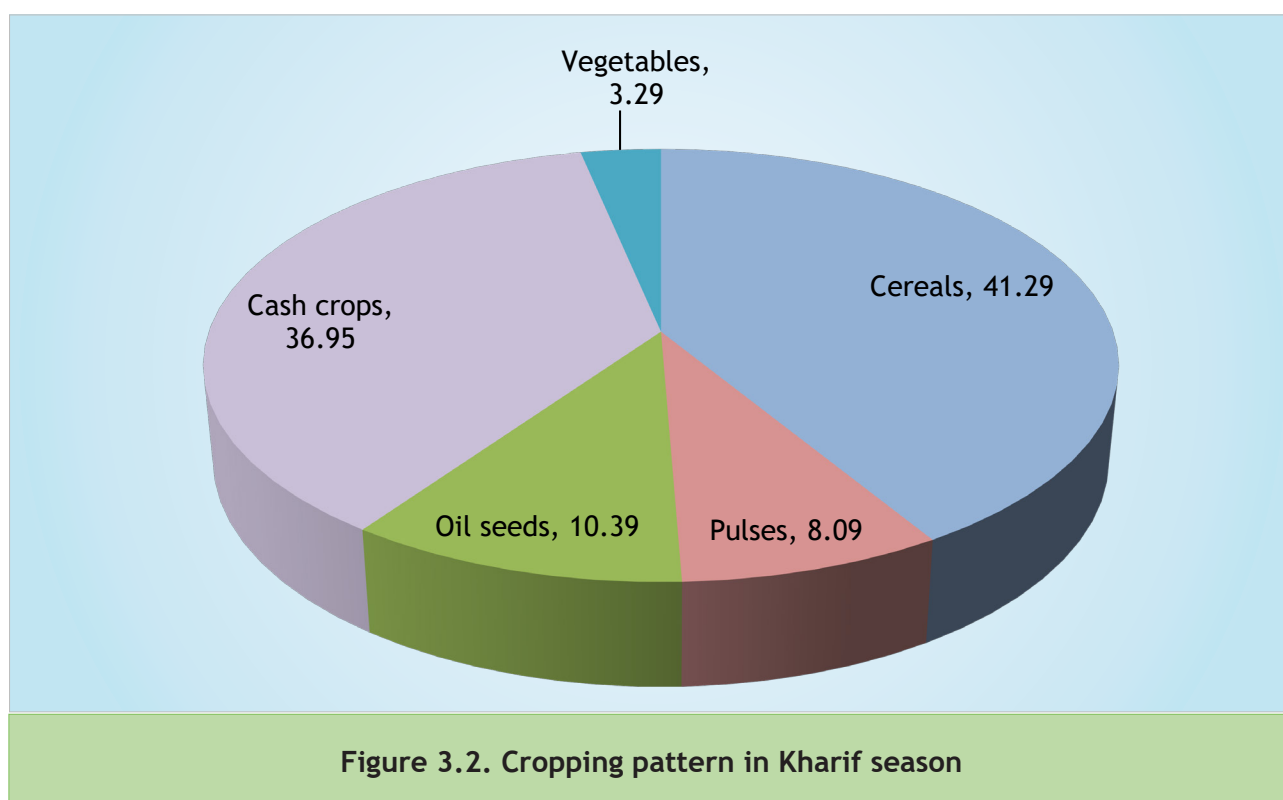
It must be noticed that irrigation was mainly available during Kharif season in the entire study area. Owing to this irrigation crisis, the cropping pattern of victim households was mostly confined to Kharif to the extent of three quarters of gross cropped area. In the remaining one quarter, Rabi crops occupied five per cent and perennial crops accounted for 20 per cent of gross cropped area. Ragi was the only Rabi crop grown in Hunsur and Periapatna taluks of Mysuru district. Sugarcane was the main perennial crop reported in Mandya and Belagavi districts. There was absolutely no crop being cultivated by the victim HH during summer in the sampled districts.

The victim households devoted 89 per cent of their kharif area for cultivating cereals, oil seeds and cash crops. The remaining 11 per cent was under pulses and vegetables. The percentage of area occupied by different crop groups out of total Kharif area during reference period is shown in **Figure 3.2**.

Table 3.7. Cropping pattern and Net returns

Sl. No.	Name of the crop	No. of HH Who have culti- vated	Cultivated area in acres (Per HH)	% of culti- vated Area to Total cropped area	Total production in Qtls Per HH	Yield per acre (Qtls.)	Average price received in Rs. per Qtl.	Gross returns per acre	Cost of production per acre (Rs.)	Net returns per acre (Rs.)	Net return per HH
1	Paddy	23	0.69	5.24	8	11.98	1204	14429	10444	3985	2750
2	Ragi*	12	1.20	4.76	4	3.36	598	2007	2734	-727	-872
3	Maize	23	2.43	18.41	23	9.31	949	8840	4620	4220	10255
4	Jowar	5	3.00	4.94	7	2.40	472	1133	2733	-1600	-4800
5	Wheat*	4	2.00	2.64	2	0.75	600	450	500	-50	-100
	<b>Total cereals</b>	<b>67</b>	<b>1.63</b>	<b>35.99</b>	<b>12</b>	<b>7.34</b>	<b>965</b>	<b>7076</b>	<b>4657</b>	<b>2419</b>	<b>3943</b>
6	Green gram	5	3.04	5.01	0	0.10	0	0	6579	-6579	-20000
7	Other pulses	4	0.88	1.15	1	1.23	1116	1371	2714	-1343	-1182
	<b>Total pulses</b>	<b>9</b>	<b>2.08</b>	<b>6.16</b>	<b>1</b>	<b>0.31</b>	<b>828</b>	<b>257</b>	<b>5856</b>	<b>-5599</b>	<b>-11646</b>
8	Soyabean	4	3.76	4.95	14	3.73	3268	12184	3762	8422	31667
9	Other oil seeds	4	2.80	3.69	0	0.09	0	0	1920	-1920	-5376
	<b>Total oil seeds</b>	<b>8</b>	<b>3.28</b>	<b>8.64</b>	<b>7</b>	<b>2.17</b>	<b>3211</b>	<b>6979</b>	<b>2975</b>	<b>4004</b>	<b>13133</b>
10	Tobacco	20	1.88	12.38	4	2.15	3237	6964	18903	-8393	-22445
11	Sugar cane**	26	1.90	16.30	232	121.78	158	19273	12303	6970	13243
12	Cotton	16	2.64	13.93	7	2.70	3339	9009	4851	4158	10977
13	Mulberry	4	0.45	0.59	18	39.44	1789	70556	33333	37223	16750
14	Ginger	4	1.41	1.86	12	8.50	0	0	0	0	0
	<b>Total Cash crops</b>	<b>70</b>	<b>1.95</b>	<b>45.06</b>	<b>91</b>	<b>46.35</b>	<b>272</b>	<b>12598</b>	<b>11581</b>	<b>1991</b>	<b>1983</b>
15	Vegetable	8	0.95	2.50	7	6.97	657	4579	11184	-6605	-6275
16	Fruits**	2	2.50	1.65	0	0.00	0	0	70000	-70000	-175000
	<b>Total Hort. crops</b>	<b>10</b>	<b>1.26</b>	<b>4.15</b>	<b>5</b>	<b>4.21</b>	<b>657</b>	<b>2762</b>	<b>34524</b>	<b>-31762</b>	<b>-40020</b>
	<b>Grand total</b>	<b>164</b>	<b>1.85</b>	<b>100.00</b>	<b>44</b>	<b>23.90</b>	<b>375</b>	<b>8956</b>	<b>8946</b>	<b>449</b>	<b>19</b>

Note: \*Ragi and wheat were the only Rabi crops; \*\*Sugarcane and fruits were perennial crops; Remaining all were Kharif crops.



Around three-fourth of the total cereal area during Kharif season was under maize and jowar. These two cereals were cultivated in all the sample districts except Mandya. The cultivation of paddy was an important cereal crop during Kharif for the victim households of Mysuru and Mandya. There were instances of Wheat crop cultivation in savadatti taluk of Belgavi district. An area of 81 per cent, out of total pulse crop of Kharif was under green gram, which was cultivated only by victim households belonging to Savadatti taluk of Belagavi district. The other pulse crops like cowpea and horse gram sharing 19 per cent of total pulse area of kharif were in Hunsur taluk of Mysuru district. Thereby, the sample districts of Mandya and Haveri did not have any trace of cultivation of pulses. The entire oilseeds area, comprising soybean and groundnut, was cultivated by victim households of Belgavi district only out of the four sample districts. Nearly one third of the victim HH were heavily dependent on Tobacco and Cotton crop for their annual revenue. Tobacco is the traditional cash crop of Hunsur and to some extent in Periapatna taluks of Mysuru district. However, tobacco was cultivated by only those farmers who had obtained government license for cultivation. Cotton was cultivated by victim households in most of the area in Haveri and Belagavi districts.

Half of the area under cash crops was under cotton and tobacco occupying 44 per cent. Mulberry and ginger together accounted for remaining six per cent of the cash crop area. While mulberry was exclusive to Maddur taluk of Mandya district, ginger was exclusive to Periapatna taluk of Mysuru district. The vegetables like cucumber, chilly, potato, onion and ridge gourd was being cultivated by 7.50 per cent of total victim households. These HHs represented all the districts except Mandya. However, the area under vegetables was only 3.30 per cent of the total Kharif area.

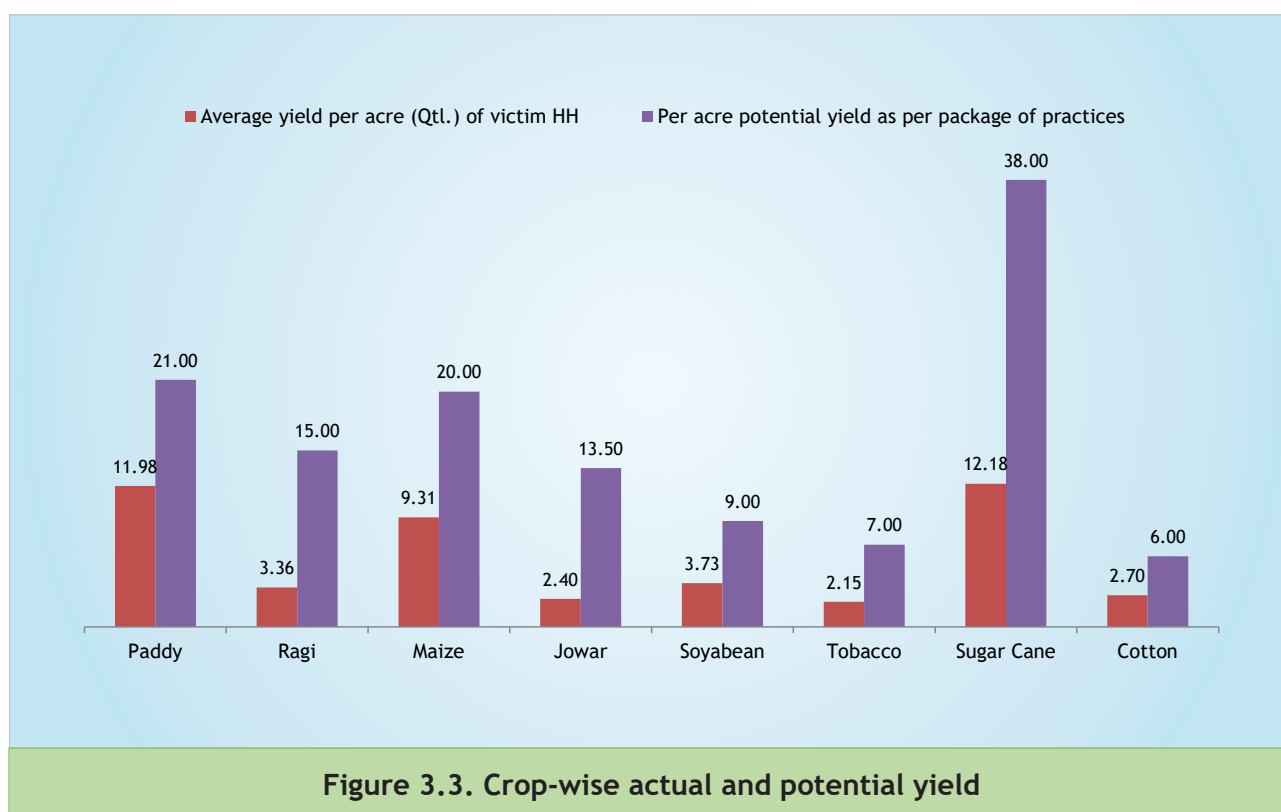
The overall cropping pattern varied from one sample district to other and one taluk to another within the sample districts. Only common feature was that the study area had faced water scarcity. This is evident from the fact that 71 per cent of the kharif cropped area was under the mercy of rain. In the case of cotton, the irrigated area was 23 per cent of total cash crops and in Tobacco, the irrigated area was as less as six per cent. Nearly 83 per cent of area under cash crops was cultivated without assured irrigation.

The victim households were facing either complete failure of rain or untimely rain during kharif season for the last three years. Owing to this irregularity of rainfall and lack of other water sources at crucial phases of crop cultivation in the study area, crop failure was a major problem to most of the victim households. Attack of pest and diseases was also a reason for crop failure. As a result, the victim HHs were incurring heavy economic losses continuously for the last three years. While collecting data on cropping pattern, the discussion with the victim households went beyond the questions framed in the questionnaire. The problem of crop failure was discussed with the officials of agricultural department who were in direct contact with the victim families. Both these discussions amply confirmed the economic distress the victim farmers were undergoing due to repeated crop failure. At this juncture, it is of paramount importance to mention that the continuous loss from crop production was one of the most prominent cause of farmer suicides in Karnataka. The extent of loss incurred in each of the crop along with other details can be clearly seen in **Table 3.7**.

Crop loss, low price for the produce and other such conditions prevail in agrarian situation. All these scenarios lead to distress among farmers. Hence farmers must be guided regarding economical ways of cultivation that would reduce the cost burden. Knowledge regarding alternative sources of income must be extended to the farmers.

After the incidence of suicide, agriculture was discontinued by nine per cent of the victim households. Therefore, the entire gross cropped area of 303.45 acres, during the reference period, was cultivated by 91 per cent of the victim households. Among those who continued crop cultivation after the suicide incidence, 49 per cent had cultivated only one crop and another 33 per cent had cultivated two different crops. The rest of the 18 per cent had cultivated three different crops during the reference period. Except sugarcane, none of the crops had irrigation facility for more than 25 to 30 per cent of the gross cropped area. Thus, 70 to 75 per cent of the gross cultivated area was under rainfed condition.

It may be observed from **Table 3.7** that the average per acre net returns generated through crop cultivation by victim households during the entire agricultural year 2015-16 was only Rs. 449 which is as good as no income. The amount indicated as loss in case of fruits is only the investment as the yields have not yet started. So, even if we ignore fruits the average income per acre works out to Rs.1600 per acre. This dismal situation was mainly due to low productivity or complete failure of the crop and net loss in the case of 11 crops out of the 16 crops grown in the study area. This is evident from **Figure 3.3** and **Table 3.7**.



Tobacco and Sugarcane are the most important crops for earning livelihood of sample farmers. But yield level achieved by the victim households, as compared to potential yield as per package of practices was only 31 per cent in Tobacco and 32 per cent in Sugarcane. Over and above this, the sale value realized for these two crops was not enough to meet the cost of cultivation. The cotton cultivators of Belagavi and Haveri were not able to cross 45 per cent of the potential yield. Unavailability of water at crucial stages of crop growth and insufficient application of fertilizers and manures are the prime causes of low productivity. Apart from low productivity, the quality of produce also suffers. While low productivity itself results in low net income, the income further dwindles due to low quality of the produce. The farmers faced complete crop failure leading to loss when the water shortage problem gets compounded with occurrence of pest and diseases.

### 3.8. Details of Credit

Indebtedness has been identified by many studies as the predominant cause for farmer suicides. It is also argued that more than the medium and large farmers, it is the small and marginal farmers who approach non-institutional sources for their credit requirement. One of the important causes which push the farmers for the desperate act of killing themselves is loan rotation where farmers take loan from different sources to repay the previous loan. When this accumulates beyond a point, they opt for institutional sources to avail credit which leads to further indebtedness. In order to understand the relation between indebtedness and farmer suicides, data pertaining to credit from family members of victim was collected. The details of the credit availed by the victim HHs is presented in **Table 3.8**. Without exception, all the victims had availed credit. One-fourth of victim HHs had loan account with almost all the sources listed in



**Table 3.8.** Nearly 61 per cent had availed credit from at least two sources. Money lender was common source among those who had borrowed from more than one source. The remaining 14 per cent of victim HHs who had availed from only one source had taken money mainly from money lenders as they could not avail loan from any other sources for one or the other reason. It has been recorded that the farmers were availing loans from money lenders at an exorbitant rate ranging from 30 to 36 per cent per annum. This is a burden on farmers and can lead to suicides. Hence to avoid such situations, the recommendations of Radhakrishnan committee in agriculture indebtedness may be followed. The Expert Group underlines the need for mitigating the burden of farmers' indebtedness to Money lenders. It recommends a one-time measure of providing long-term loans by banks to farmers to enable them to repay their debts to the moneylenders. Further, it recommends that Panchayat Raj Institutions (PRIs), civil society organizations like farmers' collectives and Non-Governmental Organizations (NGOs) should be involved in arriving at negotiated settlements with the moneylenders.

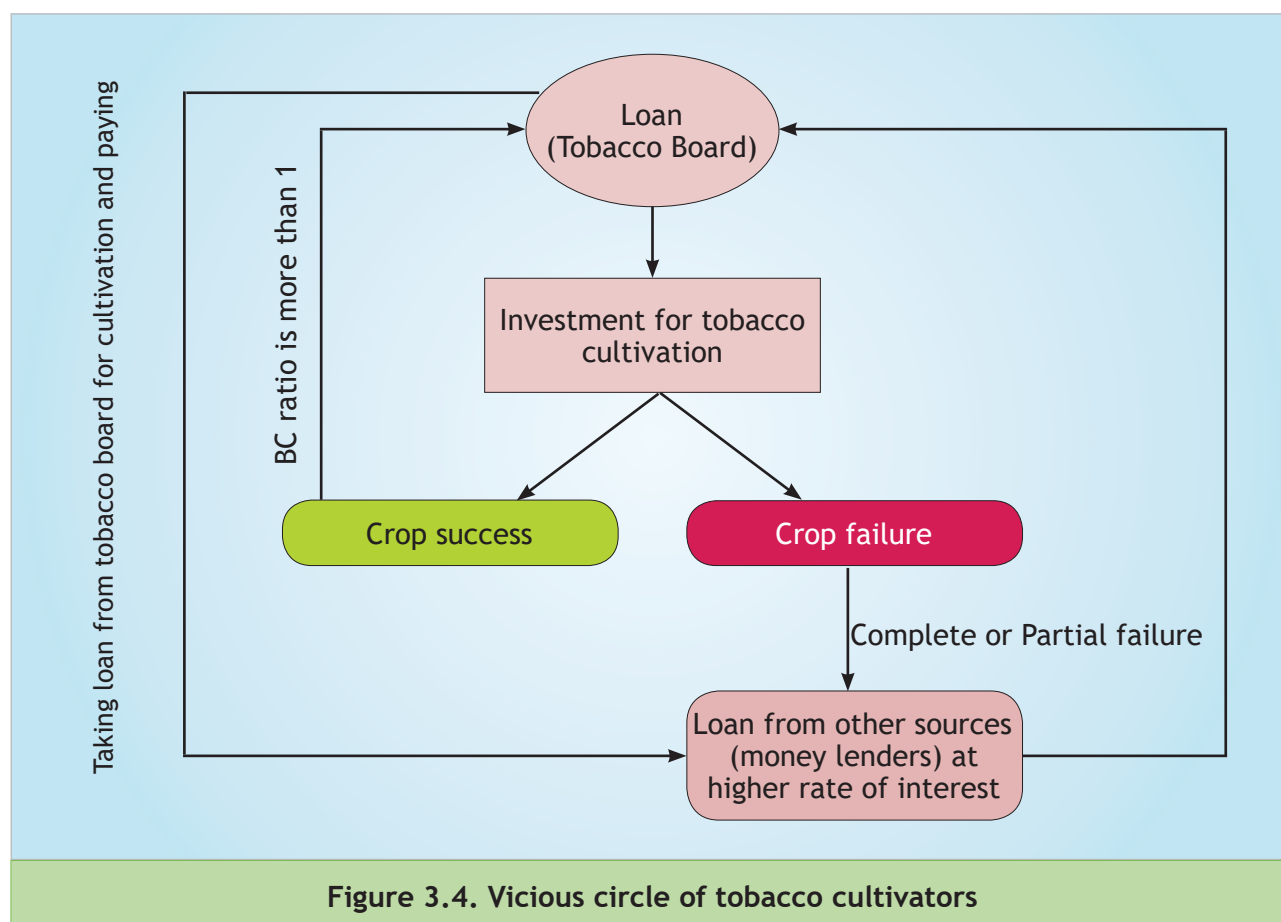
Easy access of institutional finance to every farmer is an important solution to avoid farmer suicides. This can be attained by reducing procedures and formalities of obtaining loans. Institutional mechanism to monitor the proper end use of the loan received may also solve the issue to some extent.

**Table 3.8. Details of credit**

Source	Total for entire sample size		Farming purpose		Non- Farming purpose		Out-standing Amount in Rs. Per HH	Average interest rate in per cent	Those who paid regularly (as % to sample size)
	No.*	Amount in Rs. lakh Per HH	No.**	Amount in Rs. lakh per HH	No.**	Amount in Rs. lakh per HH			
Cooperative banks	58.88	1.93	96.83	1.70	3.17	0.23	1270	4.43	14.29
Commercial banks	48.60	4.12	98.08	2.62	1.92	1.50	0	5.62	1.92
Self Help Groups	3.74	2.27	75.00	1.32	25.00	0.95	37500	18.00	50.00
Primary Land deve. bank	1.87	5.50	100.00	5.50	0.00	0.00	0	5.00	100.00
Local Money lenders	83.18	5.79	60.67	3.00	39.33	2.79	66067	20.91	12.36
Tractor loan	2.80	3.97	100.00	3.97	0.00	0.00	0	6.00	33.33
<b>Total</b>	<b>100.00</b>	<b>23.58</b>	<b>81.69</b>	<b>18.11</b>	<b>18.31</b>	<b>5.47</b>	<b>28685</b>	<b>11.89</b>	<b>12.21</b>

\* = No. as a % to total sample size; \*\* = As a % of those who borrowed

The tobacco cultivators at Hunsur and Periapatna taluks of Mysuru district have fallen into a vicious circle of debt trap as shown in **Figure 3.4**. The cultivation of tobacco is restricted to licensed farmers. Hence, tobacco cultivation was seen mainly in Hunsur, Periapatna and to some extent in Krishna Raj Nagar taluk of Mysuru district. The farmers of these taluks would sell the produce to Tobacco Board as there are no other buyers. In fact, as per statutory order, the farmers invariably have to sell the produce to Tobacco Board.



The Tobacco Board has tie-up with banks. As such, the tobacco growers would receive their payment through banks. This enables the tobacco cultivators to avail hassle-free loan from banks as compared to cultivators of other crops. Because, the bank can recover the loan by deducting the amount lent to them with interest and credit the remaining amount to their respective account. The farmers can take loan again from bank for next tobacco crop. This arrangement works fine as long as the farmers earn profit. If the crop fails, the farmers borrow loan from money lenders and pay it to bank so that they can take loan again from bank. But they will not be able repay loan to money lenders after sale of produce. They will pay only interest part to money lenders as the money lenders will be happy with regular payment of interest rather than getting back the principal amount. Repeated crop failure will have a cascading effect and they fall into debt-trap. They approach another lender and take loan to pay only the interest of first lender. This kind of

loan rotation continues as long as they have sources or lenders. When all the sources exhausts, they resort to suicide.

Thus, the precise reason for suicide would be the lack of sources of loan and not the loan itself. The sugarcane growers at Bylahongala taluk of Belagavi and Mandya taluk of Mandya district also faced the similar problem with slight difference. The difference is that the sugarcane farmers borrow from money lenders for cultivation of sugarcane. They deliver the produce to sugar industries. But the sugar companies un-duly delay the payment for several months. As a result the interest amount payable to money lenders pile-up. Over a period of time they also reach debt-trap situation.



Mysuru District





Mandya District



Mysuru District

## Chapter IV

## CAUSES AND IMPACT OF SUICIDES

One of the most important objectives of the victim household survey was to dig-out the probable causes that forced the farmers to commit suicide. The study also tried to identify the symptoms that a suicide victim is likely to display before committing suicide. The economic and social impact on the family of the victim was also an equally important objective of this field study. Therefore, this chapter presents the causes and effects of farmer suicides.

### 4.1. Symptoms of suicides

It is possible that the farmers who are inclined to commit suicide may not sleep properly, may not consume food regularly and may remain aloof from their surroundings. The observations made by the family members of the victim with respect to these symptoms are presented in **Table 4.1**. Nearly 10 to 12 per cent of the family members of victim households could observe the symptoms. Rest of the victims remained normal and did not provide any clue to their family members. Symptoms indicate that committing suicide was a spur-of-the-moment action. However, some victim households linked suicide to some incidences like: victim spoke very pessimistically about the success of crop; some lender visited their house; the entire family had to be without food; the son of victim refused to go to school since the fee was not paid; the victim returned without collecting money from the factory to which he had sold his produce and had visited several times; the victim expressed deep concern about the debt burden. Several suicides were told to have happened immediately after such incidences or after couple of days. Although, these are not the symptoms, some incidences psychologically provoke the farmer to commit suicide on such days. The chain of such events within a short span of time was also mentioned by many victim households.

**Table 4.1. Symptoms observed by family members before suicide**

Sl. No.	Symptoms	Per cent of HH to total sample who answered 'Yes'
1	Was victim mingling with his/her own family member?	94.39
2	Was victim mingling with his/her own community?	92.52
3	Was victim mingling with his/her neighbouring households/friends?	91.59
4	Was victim consuming food regularly?	90.65
5	Was victim sleeping adequately during nights?	88.79

## 4.2. Causes of suicides

Results enlightened the deterioration of economic or farming or social or all the three situations and losing all hopes to come out of that situation are the major causes of farmer suicides. The decision to commit suicide by the victim cannot be assigned to any one single reason. The final action of committing suicide was a combination of several causes. All these causes are broadly grouped into social, farming and debt related causes. This section discusses all the causes of farmer suicides under these three categories.

### 4.2.1. Social causes

The social causes are further divided into six groups which can be seen in **Table 4.2** along with the number of victim households who answered the questions as 'yes' for each of the sub-groups. The answers of the victim households were cross checked with the neighbors. According to **Table 4.2**, the worry of daughter marriage was another cause for committing suicide for 14 per cent of the sample victims. Marriage related issues like dowry, extra-marital relations and divorce and love failure were not at all the causes for suicide.

**Table 4.2. Social causes of suicides**

Sl. No.	Causes	Per cent of HH to total sample who answered 'Yes'	
		As per respondent	As per Neighbours / relatives / friends
<b>1</b>	<b>Property dispute</b>		
a	Partition of land	1.87	1.87
b	Partition of house	0.00	0.00
c	Partition of income	1.87	2.80
d	Partition of jewelleryes	0.00	0.00
<b>2</b>	<b>Marriage related issues</b>		
a	Dowry related issues	0.00	0.00
b	Extra marital affairs	0.00	0.00
c	Divorce	0.00	0.00
d	Love failure	0.00	0.00
<b>3</b>	<b>Family problems/Commitments</b>		
a	Social functions,	1.87	1.87
b	Daughter's marriage	14.02	15.89
c	Son's marriage	4.67	5.61
d	Frequent quarrel among the family members	0.93	0.93
<b>4</b>	<b>Illness</b>	<b>5.61</b>	<b>4.67</b>
<b>5</b>	<b>Alcoholic addiction / gambling / betting / chit fund</b>	<b>3.74</b>	<b>3.74</b>
<b>6</b>	<b>Fall in social reputation</b>	<b>2.80</b>	<b>4.67</b>



#### 4.2.2. Farming related causes

Among the several farming related causes mentioned by the family members of victim, irrigation problem was the most important. In 2015-16, this cause was reported by 85 per cent (lack of access to irrigation water plus failure of rainfall / drought) of the victim households. While in 2014-15 this cause was reported by 45 per cent of the victim households. Other farming related reasons for committing suicide can be seen from **Table 4.3**. Failure to avail institutional credit for one or the other reason was also very important farming related reason for suicide as mentioned by 68 per cent of the victim households. Nearly 72 per cent of the victim households mentioned that the victims were expecting waiving off loans, but it did not happen. The expectation of higher output, higher prices, loan waiving, institutional credit and Non-institutional credit was also responsible for farmer suicides, which is in line with theory of Durkeim (1896). According to this theory the probability of committing suicide is relatively higher with those individuals who are dissatisfied against their expectation. Thus, this was reported as one of the prominent farming related reason for suicide in addition to lack of access to irrigation water.

**Table 4.3. Farming related causes of suicides**

Sl. No.	Causes	Per cent of HH to total sample who answered 'Yes'	
		2014-15	2015-16
<b>1</b>	<b>Failure of crop/s</b>		
a	Pests & diseases	3.74	8.41
b	lack of access to irrigation water	28.04	41.12
<b>2</b>	<b>Due to natural calamities</b>		
a	Cyclone effect	0.00	0.93
b	Failure of rainfall/drought	17.76	44.86
c	Accidental fire	0.93	1.87
<b>3</b>	<b>Inability to sell output</b>	<b>0.00</b>	<b>0.00</b>
<b>4</b>	<b>Well failures</b>	<b>1.87</b>	<b>1.87</b>
<b>5</b>	<b>Quarrel between the victim and others</b>	<b>0.00</b>	<b>0.00</b>
<b>6</b>	<b>Expectations of:</b>		
a	Higher output	26.17	51.40
b	Higher prices	28.97	37.38
c	Loan waiving	66.36	67.29
d	Institutional credit	71.03	71.96
e	Non-institutional credit	67.29	68.22
<b>7</b>	<b>Lack of extension services</b>	<b>1.87</b>	<b>1.87</b>
<b>8</b>	<b>Delayed payment/ payment in installments for the sold output</b>	<b>7.48</b>	<b>6.54</b>
<b>9</b>	<b>Insurance for the cultivated crop</b>	<b>1.87</b>	<b>1.87</b>



### 4.2.3. Indebtedness related causes

The probe into indebted as a reason for succumbing to suicide shows that 85 per cent of the farmer suicide was due to crop loan, which can be observed in **Table 4.4**. It can be further observed from table that the burden and pressure of non-institutional loan indicated by about 71 per cent of the victim households were two inter-related reasons.

There are no sufficient funds for small and marginal farmers to cultivate their piece of land. In this situation farmers are approaching to non-institutional (local money lenders/ brokers/ land lords etc.) sources to avail the loan. The victims normally approach non-institutional sources only when they cannot get loans from institutional sources for reasons: (1) full or partial defaulting of earlier loans; (2) the victims were not able to provide all the documents required by banks for sanctioning loan and ; (3) some victims were not eligible for loans for reasons such as the land is not in their name and already have loan in other banks etc. The interest charged by money lenders was as high as 36 per cent per annum. The credit was availed for farming and non-farming purposes.

**Table 4.4. Indebted related causes of suicides**

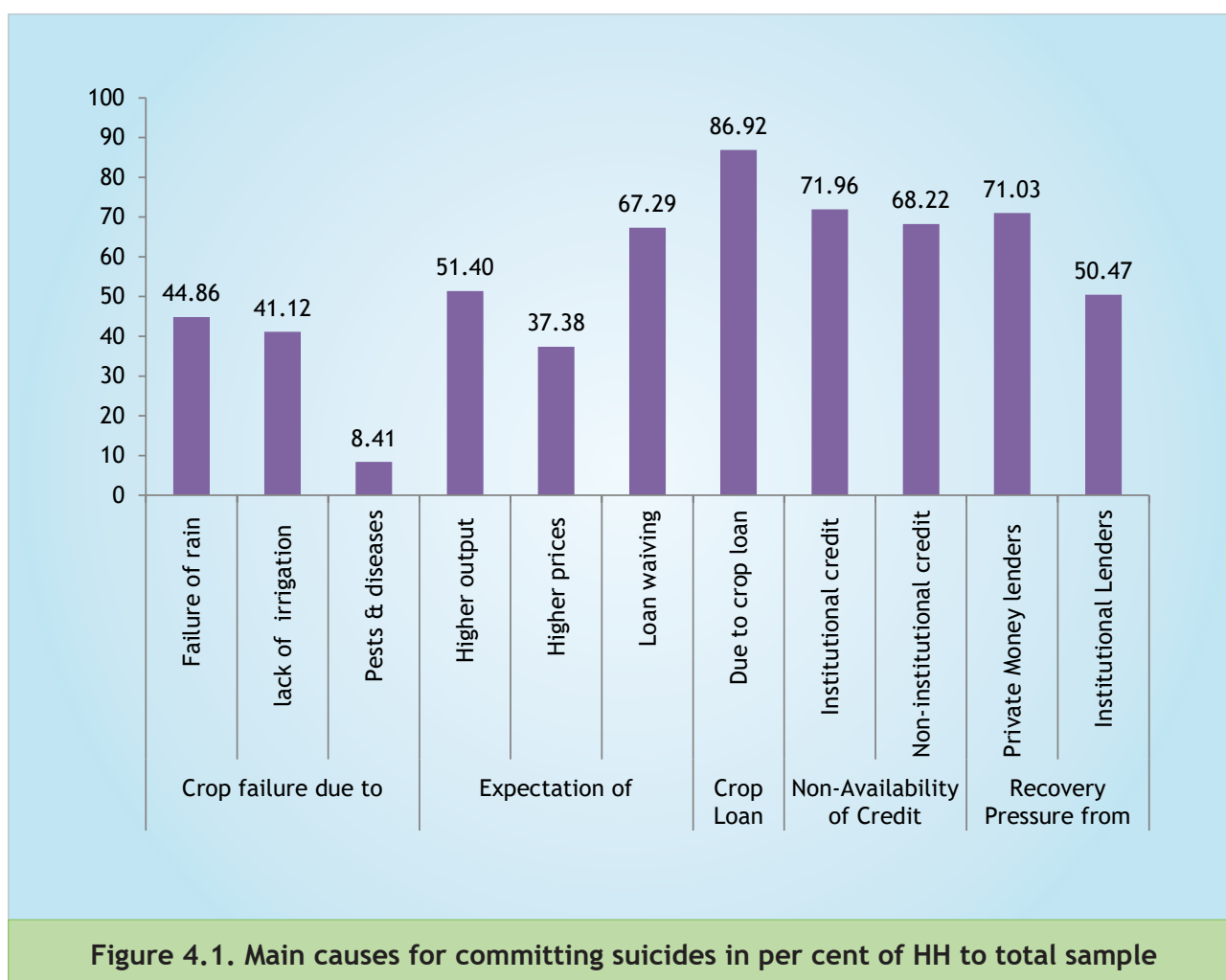
Sl. No.	Causes	Per cent of HH to total sample who answered 'Yes'	
		2014-15	2015-16
<b>1</b>	<b>Indebtedness - Institutional &amp; Non-Institutional</b>		
a	Due to crop loan	85.05	86.92
b	Due to farm equipments' loan	14.02	14.02
c	Due to non-agricultural loan	48.60	48.60
d	Due to non-institutional loan	71.03	71.03
<b>2</b>	<b>Due to pressure from institutional sources</b>	<b>44.86</b>	<b>50.47</b>
<b>3</b>	<b>Due to pressure from non-institutional sources (mainly money lenders)</b>	<b>65.42</b>	<b>70.09</b>

### 4.2.4. Ranking of causes of farmer suicides

Different causes that were identified for suicide were ranked according to the per cent of victim households who indicated the causes. The per cent of victim households who have mentioned the causes and the ranks assigned to each of the cause is shown in **Table 4.5**. Results indicate that crop loan was the top most reason for victims to commit suicide. However, a close look at the table reveal that failure of rain, lack of irrigation facilities and attack of pests and diseases together is much bigger cause than crop loan because these were the causes for crop failure. The crop failure was the major cause of suicide as mentioned by around 95 per cent of the victim households. Since the crop failed, the victims were worried about the crop loan. If they had earned profit from crop production, then the crop loan would not have made them to worry. Most important causes of farmer suicides (% of households to total sample) are depicted in **Figure 4.1**.

**Table 4.5. Ranking of social, farming and indebted related causes of suicides**

Causes	Households who assigned the cause (As a % to total sample)	Rank
Due to crop loan	86.92	1
Expectation of Institutional and non-institutional credit	71.96	2
Due to recovery pressure from money lenders	71.03	3
Loan waiving	67.29	4
Higher output	51.40	5
Due to recovery pressure from institutional lenders	50.47	6
Due to Non-agricultural loan	48.60	7
Failure of rainfall/drought	44.86	8
lack of access to irrigation water	41.12	9
Higher prices	37.38	10
Daughter's marriage	15.89	11
Due to equipment's loan	14.02	12
Pests & diseases	8.41	13
Delayed payment/ payment in instalments for the sold output	6.54	14
Son's marriage	5.61	15
Illness	4.67	16
Fall in social reputation	4.67	17
Partition of income	2.80	18
Social functions	1.87	19
Partition of land	1.87	20
Drug abuse/Alcoholic addiction	1.87	21
Gambling/betting /chit fund	1.87	22
Well failures	1.87	23
Lack of extension services	1.87	24



### 4.3. Impact of suicides on victim households

The socio-economic impact of suicide on the family of the victims is presented in **Table 4.6**. Out of the eight impacts mentioned by the victim households, no income to meet the basic requirement was the most important due to discontinuation of agricultural activities. The agricultural activities were discontinued for the reasons: firstly, many of the female members of the victim were not actively involved in agriculture; secondly, even those female who had actively worked with victim could not continue agriculture as the money lenders had already occupied the land; thirdly, the children of the victim were too young to take-up agriculture. Thus it can be clearly said that the victims' household is severely affected due to the suicide of primary bread winner of the family. Hence there is immediate need for an institutional mechanism for post suicide care. Around 60 per cent of the family members were primary educated and hence the chances of getting jobs was bleak. However, families of those victims who were matriculation and above took-up some jobs in the vicinity of their villages. Thus education can be a tool for reducing the predicament of farmer suicides as it provides other ways and means to sustain the family.

**Table 4.6. Impact of suicides on victim households**

Sl. No.	After effect	Per cent of HH to total sample who answered 'Yes'
1	No earning member	35.51
2	Agricultural activities stopped	30.84
3	Insecurity in the family	21.50
4	Family member/s under depression	18.69
5	Family member/s fell seriously ill	6.54
6	Schooling of the children stopped	4.67
7	Land sold	2.80
8	Postponement of son/daughter's marriage	0.93

#### 4.4. Suggestions to prevent suicides

Nearly 60 per cent of the family members had turned very pessimistic and did not offer any suggestions when they were asked. The suggestions offered by remaining 40 per cent victim households are given in **Table 4.7**. Inadequate water facilities and untimely rainfall coupled with frequent attack of pests and diseases are the main causes of crop failure in the entire study area. The crop failure not only wipes-out all the investment, it also makes it extremely difficult for the farmers to meet their daily food expenses. It also discourages farmer to continue agriculture. Hence, their first suggestion is to compensate them whenever the crop fails for reasons beyond their control, which is addressed by the Pradhan Mantri Fasal Bima Yojana (PMFBY) (**Annexure I**) to a certain extent. This scheme aims at providing compensation to the farmers suffering from crop loss arising out of unforeseen events. Providing irrigation facilities is also an important suggestion offered by the victim HHs which is taken care by Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) (**Annexure II**) with the major objective of expanding cultivable area under assured irrigation and introducing sustainable water conservation practices. Those who managed to escape crop failure could not get the prices they expected. This means that the price which they received in the market was not sufficient to cover the cost of cultivation. This situation arises mainly when the price falls for a temporary period due to glut in the market. Those farmers who are capable of waiting for some time, gain relatively higher profit than those who cannot wait due to credit availed from the money lenders.

The farmers also claim that Minimum Support Price (MSP) offered for selected crops does not cover their cost of cultivation - let alone profit. Therefore, the victim households feel that increasing MSP with the inclusion of profit margin would, to some extent, avoid suicides in the future. Expectation of loan waiving was expressed as one of the causes for farmer suicides by 66 per cent

of households (Table 4.3). However while indicating suggestions, as less as 4 per cent of the victim households expressed loan waiving as a means to avoid farmer suicides (Table 4.7). This might be due to the reason that the farm households consider other options like compensation during crop failure and providing irrigation facilities as vital actions to avoid farmer suicides.

**Table 4.7. Suggestions to prevent suicides**

Sl. No.	Suggestions	Per cent of HH to total sample who suggested
1	Government should pay compensation when crop fails	18.69
2	Provide irrigation facilities	13.08
3	MSP of selected crops should be based on cost of cultivation plus profit margin	11.21
4	Tobacco cultivation should be banned	8.41
5	Immediate payment to the produce sold	7.45
6	Government should help to take-up allied activities like dairy, livestock rearing	6.54
7	Loan should be given to all crops and on time	4.67
8	Loan waiving and reduction of bank interest rate	3.74
9	Only licensed money lenders should operate	1.87
10	Timely availability of inputs like seeds and fertilizers	1.87

The suggestion to ban cultivation of tobacco was from households of those victims who were cultivating tobacco in Hunsur taluk of Mysuru district. Many of the victims were cultivating tobacco despite earning meager profit or incurring loss. But the crop does not yield to its potential unless it is cultivated under very congenial conditions like irrigation facilities. If tobacco crop succeeds, then the farmers will be able to earn handsome profit. With this hope, the victims were cultivating the crop repeatedly and were incurring losses for the last two to three seasons. So the spouses of the victims felt that the victims would have been safe if tobacco cultivation was banned. Many of the farmers have already given-up tobacco cultivation in the vicinity of Hunsur taluk which clearly reflected in the cropping pattern of the region.

The suggestion of immediate payment to the produce was from sugarcane cultivators of Bylahongala taluk of Belagavi district. The sugarcane companies take several months to clear the payment to farmers for sugarcane sold to them. In fact, this was more of a complaint than a suggestion.





Mysuru District



Mandya District

## Chapter V

### FINDINGS AND POLICY SUGGESTIONS

The findings and policy suggestions are presented under the following headings as follows:

#### 5.1. Findings

- ▶ The sample covered victims of all age groups and all categories of farmers in terms of operational holding size. Nearly 83 per cent of the victims were in the age group of 31 to 60 years and 80 per cent belong to marginal and small farmers' category.
- ▶ Nearly one-third of the victims were illiterates and there were few instances of degree and diploma holders as well. About 93 per cent of the victims were married and had 2 to 3 children.
- ▶ Net income derived from agriculture in case of 22 per cent of victims was not enough to meet the basic needs; the income of 45 per cent were in hand-to-mouth situation.
- ▶ Cropping pattern was confined mainly to Kharif season. The suicide incidents was reported in all the crops grown by the victims. Majority of the victims had grown cash crop mainly tobacco and sugarcane.
- ▶ Half of the debt was for non-farming purposes like medical, education of children, marriages and housing. The tobacco cultivators of Hunsur and Periapatna taluks were in a vicious circle of debt and had accumulated huge debt burdens as they were unable to repay loan due to low productivity and income.
- ▶ Farmers of Mandya and Belgavi districts were more inclined to sugarcane cultivation as they had assurance from the sugar factories to buy the produce. But the undue delay in payment by the sugar factories was deterrent to improve their economic conditions.
- ▶ Commercial Banks and Cooperatives was the first preference of sample victims for credit. But they were unable to repay the loans as per schedule due to crop failures. Since they did not had any allied activities, crop failure was a big economic setback. For this reason, they could not raise further loans from institutional sources and relied on private money lenders at exorbitant interest rates of even at 36 per cent per annum.
- ▶ The decision to commit suicide by the victim cannot be attributed to a single reason. The final action of committing suicide was a combination of several causes which can be grouped mainly as social, farming and debt related.



- ▶ Crop failure was the major cause of suicide as mentioned by 95 per cent of the victim households. Since the crop failed, the victims were worried about the crop loan.
- ▶ Pressure from private money lenders and recovery notices from institutional sources was also the indicated reasons.
- ▶ Further, non-availability of credit from institutional and non-institutional sources as they have already availed the loan, which makes them helpless and decide to commit suicide.
- ▶ Expectations of higher output, prices and loan waiving are also the reasons to commit suicide. High Price expectation for their crops which are often not met is one of the reasons that influence farmers to commit suicides.
- ▶ Nearly 90 per cent of the victims did not display any symptoms indicating the possibility of committing suicide, as per the observations of their family members. Victims behaved normal as they were consuming food, mingling with their family member, neighbors and fellow farmers. Therefore, it is evident that the decision is always very confidential and personal and it also supports the well-argued “individualization” of the farmer under the pressure of market behavior and commercialization.
- ▶ Absence of the bread-winner in the house is the main impact. Nearly 35 per cent of the households have indicated that this fact cripples the household totally. These families had to starve as the land was already under the control of the private money lenders and the children were not in the age to undertake cultivation.
- ▶ Thirty per cent of the victim families had developed severe resentment towards agriculture that they completely stopped agriculture and looked out for other alternatives for livelihood.
- ▶ Feeling of insecurity and depression was also a visible impact. In fact, some of the family members were so depressed that they were not ready to provide information.
- ▶ The question of selling land was possible only by three per cent of the victim households as many victims had mortgaged the land before committing suicide. The victim households had no asset worthy of selling. Hence, the impact in terms of selling the land or other assets was not a visible impact.
- ▶ There were few instances of discontinuation of education of children due to the death of head of household.

## 5.2. Policy Suggestions

- ▶ Crop failure was found to be the root cause for farmer suicides. Therefore, it is suggested that individual farmers should be brought under the ambit of crop insurance. More intensively the State Government must ensure through the proper policy framework that indemnity be paid within a week after reporting of the crop failure. Payments made months after the failure pushes the farmer into the debt trap.
- ▶ Risk hedging through crop and enterprise diversification should be encouraged to reduce farmers distress/risk aiming at sustainable income.
- ▶ Expectations of higher price was another major cause for suicide. Hence, there is a need for government intervention through MSP covering cost of production plus reasonable profit margin. This can be assured through a well-designed Income Insurance Scheme covering both yield and price risk as followed in the United States.
- ▶ Non-payment or delay of money to the producers by buyers (in the case of sugarcane procurement) should be avoided through designing suitable institutional mechanism.
- ▶ The condition of the victim households had worsened post-suicide of main family member. Hence institutional mechanism for post-suicide care is required.
- ▶ Proper usage of the compensation amount received by the victim households must be ensured. About 50 per cent of the total compensation must be used in recovering the loan amount so that the burden of outstanding amount on the HH can be reduced. Remaining amount can be extended to the victim households for investing in income generating activities. Assistance by the agriculture department is required for efficient utilisation of funds.
- ▶ One of the main causes for farmer suicides was low price for their produce. The producers share in consumer rupee was meager and share must be ensured at 50 per cent of the consumer price. This could be achieved through encouraging direct selling and involvement in value chain activities. In this context, special efforts from agriculture and allied departments is required.
- ▶ The thought of committing suicide was momentary. Several suicides can be averted by establishing a '*Farmers Welfare Cell*' with good amount of rolling fund at the disposal and the farmer representatives on the governing body could be constituted. The cell can provide counselling at that moment and necessary financial assistance for meeting the pressing needs upon verification/scrutiny. This should be connected through a hot line working 24/7 and with mandated response time less than one hour. NGOs, religious institutions, agriculture and horticulture department should also be involved in providing counselling to farmers.
- ▶ Regulating the informal credit market through licensing and fixing the norms for charging interest rate and terms of lending is required. There is a need to create indemnity to non-

institutional borrowers. Radhakrishnan Committee recommendations (2007) regarding rural informal credit market should be followed, which underlines the need for mitigating the burden of farmers' indebtedness to money lenders. It recommends a one-time measure of providing long-term loans by banks to farmers to enable them to repay their debts to the moneylenders. Further, it recommends that Panchayat Raj Institutions (PRIs), civil society organizations like farmers' collectives and Non-Governmental Organizations (NGOs) should be involved in arriving at negotiated settlements with the moneylenders.

- ▶ Higher number of farmer suicides occurred in resource rich districts like Haveri (125), Mandya (118), Mysuru (113), whereas the resource poor (drought prone) districts exhibited relatively lesser number of suicides. This might be due to the ability of farmers in resource poor regions to cope up with agrarian distress and their awareness of alternate choices. Such farmers are seen to have evolved over a period of time with various strategies that can successfully help them to manage the stress conditions. On a contrary the farmers from resource rich areas are left with less options to take up. For instance in command areas, main crops were paddy and sugarcane and during water crisis, they hardly have any other option to sustain the crop since techniques like drip irrigation and mulching are not viable options. Hence capacity building on coping strategies should be given to resource rich regions as well.
- ▶ The victim families should be given preference in availing benefits from various developmental schemes atleast for a period of five years. Such schemes may also include social welfare schemes.
- ▶ The issue of farmer suicide should not be sensitized much through print and electronic media as it might influence other farmers to surrender to suicide.

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Mysuru District



Haveri District

## ANNEXURES

### Annexure I

#### PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

The new scheme is in line with the One Nation-One scheme theme. It incorporates the best features of all the previous schemes and at the same time, all the previous shortcomings have been removed. The Pradhan Mantri Fasal Bima Yojana (PMFBY) scheme will replace the existing two schemes National Agricultural Insurance Scheme as well as Modified NAIS. PMBFY aims for supporting sustainable production in agriculture sector by way of

- a. To provide compensation to farmers suffering crop loss/damage arising out of unforeseen events
- b. To stabilize the income of farmers to ensure their continuance in farming
- c. To encourage farmers to adopt innovative and modern agricultural practices
- d. To ensure flow of credit to the agriculture sector; which will attribute to food security, crop diversification and enhancing growth and competitiveness of agriculture sector besides protecting farmers from production risks.

The scheme covers all the farmers including sharecroppers and tenant farmers growing the notified crop in the notified area. However the farmers should have insurable interest on the insured crops. The scheme would be optional for the non loanee farmers.



## Annexure II

### Prime Minister Krishi Sinchayee Yojana

Prime Minister Krishi Sinchayee Yojana was stated in the year 2015 which was implemented by the Ministries of Agriculture, Water Resources and Rural Development. Ministry of Agriculture will promote efficient water conveyance and precision water application devices like drips, sprinklers, pivots, rain-guns in the farm “(Jal Sinchan)”, construction of micro-irrigation structures to supplement source creation activities, extension activities for promotion of scientific moisture conservation and agronomic measures.

The broad objectives of PMKSY are:

- a. Achieve convergence of investments in irrigation at the field level
- b. Enhance the physical access of water on the farm and expand cultivable area under assured irrigation
- c. Integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices.
- d. Improve on-farm water use efficiency to reduce wastage and increase availability both in duration and extent,
- e. Enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop).
- f. Enhance recharge of aquifers and introduce sustainable water conservation practices
- g. Ensure the integrated development of rainfed areas using the watershed approach towards soil and water conservation, regeneration of ground water, arresting runoff, providing livelihood options and other NRM activities.
- h. Promote extension activities relating to water harvesting, water management and crop alignment for farmers and grass root level field functionaries.
- i. Explore the feasibility of reusing treated municipal waste water for peri-urban agriculture, and
- j. Attract greater private investments in irrigation. This will in turn increase agricultural production and productivity and enhance farm income.

## Annexure III

### Recommendations of Radhakrishna committee report on Agricultural indebtedness

Expert group was formed headed by R.Radhakrishna to study the reasons for agricultural indebtedness and to come up with possible suggestions.

#### 1. Rescheduling of Loans of Farmers Affected by Natural Calamities

The Expert Group recommends that

- a. the loans of all the affected families should be rescheduled,
- b. the families whose loans are rescheduled should be eligible for fresh loans, and
- c. the interest liability of the borrowers for the extended period of up to two years (both for short and long term loans) should be waived and the financial burden equally shared between the central and state governments.

#### 2. Credit for Rainfed Areas

Rainfed areas in many parts of India are prone to frequent crop failures and need special treatment. The Expert Group recommends that in the event of crop failure for one year, the loans should be rescheduled and fresh loans be made available. Should the crop fail for the second consecutive year, as per the assessment of revenue authorities, in addition to rescheduling of the crop loan, interest for the extended one year period should be waived and the financial burden equally shared between the central and state governments.

#### 3. Formalisation of Informal Credit

The Expert Group underlines the need for mitigating the burden of farmers' indebtedness to Money lenders. It recommends a one-time measure of providing long-term loans by banks to farmers to enable them to repay their debts to the money lenders. Further, it recommends that Panchayat Raj Institutions (PRIs), civil society organizations like farmers' collectives and Non-Governmental Organizations (NGOs) should be involved in arriving at negotiated settlements with the moneylenders. This would also help in achieving the objective of financial inclusion. The modalities of the scheme may be worked out by the National Bank for Agriculture and Rural Development (NABARD) for early implementation. The cost of making this scheme operational in the distressed districts should be met by creating a '*Moneylenders Debt Redemption Fund*' with contribution from central and state governments. Initially, Rs.100 crores should be earmarked for this purpose.

## Annexure IV

### Comments on Draft Report by Centre for Management of Agriculture, IIM, Ahmedabad

The comments received on draft report from the Centre for Management of Agriculture, Indian Institute of Management, Ahmedabad.

**1. Title of the draft report examined:** Farmer Suicides in Karnataka

**2. Date of receipt of the Draft report:** April 7, 2017

**3. Date of dispatch of the comments:** April 28, 2017

#### 4. Comments on the objectives

The topic of the study is of highest relevance in the Indian agrarian context - of this there is hardly any doubt. Given the very high incidences of farming related suicides in rural India, the study aims to analyze the spread of farmer suicides and the main reasons behind it. It also studies the socio-economic characteristics, farming patterns and indebtedness of victim households i.e. defined as households where some member (usually the leader) has committed suicide in recent times. Based on analysis of some very micro level first hand survey based information, the authors also propose relevant policies that need to be strengthened so that such incidences can be minimized, and ideally wiped off entirely. Moreover, there is also an assessment of how the loss of prime bread winning member affects the victim households in their ensuing livelihood. While these are very relevant and useful objectives and the authors have produced very vital primary knowledge on the subject matter, the study would have benefited if there was some more analytical content included in the objective. The prime output here, as a result of this omission, is mostly descriptive. The study could have included some causal variables that would help in understanding the statistical probabilities of observing such fatal behavior based on similar socio-economic and agrarian characteristics elsewhere in the country.

#### 5. Comments on the methodology

The methodology is quite consistent with the study objectives: a primary survey of victim families from four of the top farmer suicide districts in Karnataka during the year 2015-16. These districts are Haveri, Mandya, Mysuru and Belgavi. This is a significant improvement from the only other primary data source on farmer suicides, namely the NCRB (National Crime Records Bureau). NCRB data gives a gender wise disaggregation of victims for the entire country and the causes are that which are reported with the local authorities. The present survey is a randomized sample based

enumeration and goes into socio-economic details that have not been covered by NCRB. Moreover, NCRB data gives information for the year 2014 and the present survey is more updated with information about suicides that took place during 1<sup>st</sup> of July 2015 to 30<sup>th</sup> of June 2016. The sample size is also reasonable as it covers 7 per cent of the total suicides in Karnataka and 14 per cent of the victim families that have been compensated. There are a few shortfalls or exclusions in the methodology that could have generated deeper insights. To begin with, there are some exclusions from the sample surveyed: first, those families that have not sought financial compensation from government - their names are not on the list in the Department of Agriculture, Karnataka and excluded from sampling. Second, families that sought compensation but did not receive it as of the date of survey are also excluded. Third, farm labor have not been included in the survey. These could lead to some exclusion bias in the sample making comparative assessments difficult. It would also have been nice to include one district where the suicides rates have been low. This could provide some locational heterogeneity and comparison with other development parameters such as urbanization etc. An important -and critical - omission is not including farmers with a similar socio-economic background from similar locations, who faced similar stress, but did not resort to suicide. This gives chance for significant selection biases.

## 6. Comments on the Presentation, Get up etc.

In general the report is very well structured and presented. Chapters and sub-sections are very clearly delineated and tables are nicely done. There are some suggestions to improve at places. For example, **Table 3.3** is difficult to interpret. What do the numbers in columns 3 and 4 mean? Average size of the holding or number of holdings? It will be good to add units in the columns 3 and 4 as well. In **Table 3.6** it is not clear where will interest payments fit in? Is it not a part expenditures? A note can be added, if such data is not collected. In **Figure 3.1**, can a two-sample test be done for one group being '*Marginal and Small*' versus the other group '*Medium and Large*'? It is important to know if the incomes from both salary and agriculture differ between these two. If not then it makes the identity of victims more complicated from the perspective of land holdings size. **Table 4.6** is difficult to interpret as eliciting response for some questions can be confounding. For instance, saying that 0.93 per cent of the victim families '*postponed their children's marriage*' does not say anything. What if only 5 out of the 107 victim families had children of a marriageable age and were actually planning to marry them? This statistic will only make sense when reported as a percentage of some sub-sample based on the specific question or criteria. Another perplexing result is in **Table 4.7** where it is reported that only 3.74 per cent of the victim households suggest that loans should be waved. However, when we see **Table 4.3**, 66.36 per cent victims had high '*expectations of loan being waved*'. Such anomalies need to be explained a little bit more.

## 7. Overall View on Acceptability of the Report

Having pointed to out to some areas of improvement or clarification, the end assessment is that the report is an excellent contribution to this very important subject matter. It not only brings

in very unique data at a micro-level, usually not found in standard information sources, but also points to some very important policy measures. These policy insights are not merely based on secondary data and assessments but based on direct inputs of victims who have undergone severe personal loss and suffering. Apart from the very apparent suggestions, there are some insights that I feel can be additionally taken away after going through the report: first, an important problem which surfaces is loan rotation where farmers take loans from different sources to pay of the previous loans. When this accumulates beyond a point, they opt for non-institutional credit at a very high interest rates. The problem then assumes a cruel dimension as informal creditors often use personal coercion measures for recovery. This is something which pushes them for the desperate act of killing themselves. Second, the study also highlights the plight of victim families after their lead member has passed away. There is severe need for an institutional mechanism (either from state or non-governmental actors) for post suicide care and rehabilitation. Third, the results point out to a lacuna as far as any regulatory mechanism for informal credit is concerned. It is understood that non-institutional credit is transacted very informally, yet there needs to be some mechanism in place where there is some kind of indemnity assured to borrowers. Fourth, the menace of buyers (such as sugarcane producers in the sampled region) not paying money in time is something which has to be investigated and those defaulting should be criminally persecuted and be directly be held liable for abetment of suicides. Here state or non-state actors need to provide legal support to farmers who are unfairly treated. All of these deep insights would not be possible but for a detailed primary study such as this.

#### **Action taken by the authors based on the comments received:**

All the comments made have been addressed at the appropriate places in this report.





Mysuru District



Mandya District







**Agricultural Development and Rural Transformation Centre**  
**INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE**

Dr. V.K.R.V. Rao Road, Nagarabhavi, Bengaluru - 560 072

Phone: +91-80-23215468, 23215519; Fax: +91-80-23217008

Email: [admn@isec.ac.in](mailto:admn@isec.ac.in); website: <http://www.isec.ac.in>